

SECTION SF 30 BLOCK 14 CONTINUATION PAGE

SUMMARY OF CHANGES

Amendment 0002 is issued to provide the following:

1. Revisions to [bid] SCHEDULE
2. Revision to Section 00800 SPECIAL CLAUSES under SC-1 "Commencement, Prosecution, And Completion Of Work."
3. Revision to Section 01145 SITE-SPECIFIC SUPPLEMENTARY REQUIREMENTS paragraph 1.5.1 Milestones.
4. Revision to Section 01355 ENVIRONMENTAL PROTECTION, paragraph 3.3.4 Points of Compliance and Monitoring Locations
5. Revision to Section 01720, SURVEYING, Table 01720-2 "Hydrographic Surveying Requirements."
6. Subcontracting Plan Letter dated Rev Nov 19, 2002 is incorporated herein.
7. Clauses 52.219-9 Alt 1 Small Business Subcontracting Plan and 52.219 –16 Liquidated Damages – Subcontracting Plan are incorporated herein.
8. Proposal Due date remain unchanged: 03 April, 2003, 2:00 PM local time.
9. NOTICE TO OFFERORS: Offerors must acknowledge receipt of this amendment by number and date on offer or by telegram. Please mark on outside of the envelope in which the offer is enclosed to show amendment received.

The attached revised specification sections supersede and replace the corresponding specification sections. Specification changes are generally identified, for convenience, by strikeout for deletions, and underlining of text for additions. All portions of the revised or new pages shall apply whether or not changes have been indicated.

Encl:

Schedule (revised)

Section 00700, 52.219-9 and 52.219-16 (new)

Section 00800 (revised)

Section 01145 (revised)

Section 01355 (revised)

Section 01720 (revised)

Subcontracting Plan Letter dated Rev Nov, 19, 2002

SECTION 00700 - CONTRACT CLAUSES

The following have been added by full text:

52.219-9 SMALL BUSINESS SUBCONTRACTING PLAN (JAN 2002)--ALTERNATE I (OCT 2001).

(a) This clause does not apply to small business concerns.

(b) Definitions. As used in this clause--

Commercial item means a product or service that satisfies the definition of commercial item in section 2.101 of the Federal Acquisition Regulation.

Commercial plan means a subcontracting plan (including goals) that covers the offeror's fiscal year and that applies to the entire production of commercial items sold by either the entire company or a portion thereof (e.g., division, plant, or product line).

Individual contract plan means a subcontracting plan that covers the entire contract period (including option periods), applies to a specific contract, and has goals that are based on the offeror's planned subcontracting in support of the specific contract, except that indirect costs incurred for common or joint purposes may be allocated on a prorated basis to the contract.

Master plan means a subcontracting plan that contains all the required elements of an individual contract plan, except goals, and may be incorporated into individual contract plans, provided the master plan has been approved.

Subcontract means any agreement (other than one involving an employer-employee relationship) entered into by a Federal Government prime Contractor or subcontractor calling for supplies or services required for performance of the contract or subcontract.

(c) The apparent low bidder, upon request by the Contracting Officer, shall submit a subcontracting plan, where applicable, that separately addresses subcontracting with small business, veteran-owner small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns. If the bidder is submitting an individual contract plan, the plan must separately address subcontracting with small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns, with a separate part for the basic contract and separate parts for each option (if any). The plan shall be included in and made a part of the resultant contract. The subcontracting plan shall be submitted within the time specified by the Contracting Officer. Failure to submit the subcontracting plan shall make the bidder ineligible for the award of a contract.

(d) The offeror's subcontracting plan shall include the following:

(1) Goals, expressed in terms of percentages of total planned subcontracting dollars, for the use of small business, veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns as subcontractors. The offeror shall include all subcontracts that contribute to contract performance, and may include a proportionate share of products and services that are normally allocated as indirect costs.

(2) A statement of--

(i) Total dollars planned to be subcontracted for an individual contract plan; or the offeror's total projected sales, expressed in dollars, and the total value of projected subcontracts to support the sales for a commercial plan;

(ii) Total dollars planned to be subcontracted to small business concerns;

(iii) Total dollars planned to be subcontracted to veteran-owned small business concerns;

(iv) Total dollars planned to be subcontracted to HUBZone small business concerns;

(v) Total dollars planned to be subcontracted to small disadvantaged business concerns; and

(vi) Total dollars planned to be subcontracted to women-owned small business concerns.

(3) A description of the principal types of supplies and services to be subcontracted, and an identification of the types planned for subcontracting to--

(i) Small business concerns;

(ii) Veteran-owned small business concerns;

(iii) HUBZone small business concerns;

(iv) Small disadvantaged business concerns; and

(v) Women-owned small business concerns.

(4) A description of the method used to develop the subcontracting goals in paragraph (d)(1) of this clause.

(5) A description of the method used to identify potential sources for solicitation purposes (e.g., existing company source lists, the Procurement Marketing and Access Network (PRO-Net) of the Small Business Administration (SBA), veterans service organizations, the National Minority Purchasing Council Vendor Information Service, the Research and Information Division of the Minority Business Development Agency in the Department of Commerce, or small, HUBZone, small disadvantaged, and women-owned small business trade associations). A firm may rely on the information contained in PRO-Net as an accurate representation of a concern's size and ownership characteristics for the purposes of maintaining a small, veteran-owned small, HUBZone small, small disadvantaged, and women-owned small business source list. Use of PRO-Net as its source list does not relieve a firm of its responsibilities (e.g., outreach, assistance, counseling, or publicizing subcontracting opportunities) in this clause.

(6) A statement as to whether or not the offeror included indirect costs in establishing subcontracting goals, and a description of the method used to determine the proportionate share of indirect costs to be incurred with—

- (i) Small business concerns;
- (ii) Veteran-owned small business concerns;
- (iii) HUBZone small business concerns;
- (iv) Small disadvantaged business concerns; and
- (v) Women-owned small business concerns.

(7) The name of the individual employed by the offeror who will administer the offeror's subcontracting program, and a description of the duties of the individual.

(8) A description of the efforts the offeror will make to assure that small business, veteran-owned small business, HUBZone small business, small disadvantaged business and women-owned small business concerns have an equitable opportunity to compete for subcontracts.

(9) Assurances that the offeror will include the clause of this contract entitled "Utilization of Small Business Concerns" in all subcontracts that offer further subcontracting opportunities, and that the offeror will require all subcontractors (except small business concerns) that receive subcontracts in excess of \$500,000 (\$1,000,000 for construction of any public facility) to adopt a subcontracting plan that complies with the requirements of this clause.

(10) Assurances that the offeror will--

- (i) Cooperate in any studies or surveys as may be required;
- (ii) Submit periodic reports so that the Government can determine the extent of compliance by the offeror with the subcontracting plan;

(iii) Submit Standard Form (SF) 294, Subcontracting Report for Individual Contracts, and/or SF 295, Summary Subcontract Report, in accordance with paragraph (j) of this clause. The reports shall provide information on subcontract awards to small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, small disadvantaged business concerns, women-owned small business concerns, and Historically Black Colleges and Universities and Minority Institutions. Reporting shall be in accordance with the instructions on the forms or as provided in agency regulations.

(iv) Ensure that its subcontractors agree to submit SF 294 and SF 295.

(11) A description of the types of records that will be maintained concerning procedures that have been adopted to comply with the requirements and goals in the plan, including establishing source lists; and a description of the offeror's efforts to locate small business, veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns and award subcontracts to them. The records shall include at least the following (on a plant-wide or company-wide basis, unless otherwise indicated)

(i) Source lists (e.g., PRO-Net), guides, and other data that identify small business, veteran-owner small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns.

(ii) Organizations contacted in an attempt to locate sources that are small business, veteran-owned small business, HUBZone small business, small disadvantaged business, or women-owned small business concerns.

(iii) Records on each subcontract solicitation resulting in an award of more than \$100,000, indicating--

(A) Whether small business concerns were solicited and, if not, why not;

(B) Whether veteran-owned small business concerns were solicited and, if not, why not;

(C) Whether HUBZone small business concerns were solicited and, if not, why not;

(D) Whether small disadvantaged business concerns were solicited and, if not, why not;

(E) Whether women-owned small business concerns were solicited and, if not, why not; and

(F) If applicable, the reason award was not made to a small business concern.

(iv) Records of any outreach efforts to contact--

(A) Trade associations;

(B) Business development organizations;

(C) Conferences and trade fairs to locate small, HUBZone small, small disadvantaged, and women-owned small business sources; and

(D) Veterans service organizations.

(v) Records of internal guidance and encouragement provided to buyers through--

(A) Workshops, seminars, training, etc.; and

(B) Monitoring performance to evaluate compliance with the program's requirements.

(vi) On a contract-by-contract basis, records to support award data submitted by the offeror to the Government, including the name, address, and business size of each subcontractor. Contractors having commercial plans need not comply with this requirement.

(e) In order to effectively implement this plan to the extent consistent with efficient contract performance, the Contractor shall perform the following functions:

(1) Assist small business, veteran-owner small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns by arranging solicitations, time for the preparation of bids, quantities, specifications, and delivery schedules so as to facilitate the participation by such concerns. Where the Contractor's lists of potential small business, veteran-owner small business, HUBZone small business, small disadvantaged business, and women-owned small business subcontractors are excessively long, reasonable effort shall be made to give all such small business concerns an opportunity to compete over a period of time.

(2) Provide adequate and timely consideration of the potentialities of small business, veteran-owner small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns in all "make-or-buy" decisions.

(3) Counsel and discuss subcontracting opportunities with representatives of small business, veteran-owner small business, HUBZone small business, small disadvantaged business, and women-owned small business firms.

(4) Provide notice to subcontractors concerning penalties and remedies for misrepresentations of business status as small, veteran-owner small business, HUBZone small, small disadvantaged, or women-owned small business for the purpose of obtaining a subcontract that is to be included as part or all of a goal contained in the Contractor's subcontracting plan.

(f) A master plan on a plant or division-wide basis that contains all the elements required by paragraph (d) of this clause, except goals, may be incorporated by reference as a part of the subcontracting plan required of the offeror by this clause; provided--

(1) the master plan has been approved, (2) the offeror ensures that the master plan is updated as necessary and provides copies of the approved master plan, including evidence of its approval, to the Contracting Officer, and (3) goals and any deviations from the master plan deemed necessary by the Contracting Officer to satisfy the requirements of this contract are set forth in the individual subcontracting plan.

(g) A commercial plan is the preferred type of subcontracting plan for contractors furnishing commercial items. The commercial plan shall relate to the offeror's planned subcontracting generally, for both

commercial and Government business, rather than solely to the Government contract. Commercial plans are also preferred for subcontractors that provide commercial items under a prime contract, whether or not the prime contractor is supplying a commercial item.

(h) Prior compliance of the offeror with other such subcontracting plans under previous contracts will be considered by the Contracting Officer in determining the responsibility of the offeror for award of the contract.

(i) The failure of the Contractor or subcontractor to comply in good faith with (1) the clause of this contract entitled "Utilization Of Small Business Concerns," or (2) an approved plan required by this clause, shall be a material breach of the contract.

(j) The Contractor shall submit the following reports:

(1) Standard Form 294, Subcontracting Report for Individual Contracts. This report shall be submitted to the Contracting Officer semiannually and at contract completion. The report covers subcontract award data related to this contract. This report is not required for commercial plans.

(2) Standard Form 295, Summary Subcontract Report. This report encompasses all of the contracts with the awarding agency. It must be submitted semi-annually for contracts with the Department of Defense and annually for contracts with civilian agencies. If the reporting activity is covered by a commercial plan, the reporting activity must report annually all subcontract awards under that plan. All reports submitted at the close of each fiscal year (both individual and commercial plans) shall include a breakout, in the Contractor's format, of subcontract awards, in whole dollars, to small disadvantaged business concerns by North American Industry Classification System (NAICS) Industry Subsector. For a commercial plan, the Contractor may obtain from each of its subcontractors a predominant NAICS Industry Subsector and report all awards to that subcontractor under its predominant NAICS Industry Subsector.

(End of clause)

52.219-16 LIQUIDATED DAMAGES-SUBCONTRACTING PLAN (JAN 1999)

(a) Failure to make a good faith effort to comply with the subcontracting plan, as used in this clause, means a willful or intentional failure to perform in accordance with the requirements of the subcontracting plan approved under the clause in this contract entitled "Small Business Subcontracting Plan," or willful or intentional action to frustrate the plan.

(b) Performance shall be measured by applying the percentage goals to the total actual subcontracting dollars or, if a commercial plan is involved, to the pro rata share of actual subcontracting dollars attributable to Government contracts covered by the commercial plan. If, at contract completion or, in the case of a commercial plan, at the close of the fiscal year for which the plan is applicable, the Contractor has failed to meet its subcontracting goals and the Contracting Officer decides in accordance with paragraph (c) of this clause that the Contractor failed to make a good faith effort to comply with its subcontracting plan, established in accordance with the clause in this contract entitled "Small Business Subcontracting Plan," the Contractor shall pay the Government liquidated damages in an amount stated.

The amount of probable damages attributable to the Contractor's failure to comply shall be an amount equal to the actual dollar amount by which the Contractor failed to achieve each subcontract goal.

(c) Before the Contracting Officer makes a final decision that the Contractor has failed to make such good faith effort, the Contracting Officer shall give the Contractor written notice specifying the failure and permitting the Contractor to demonstrate what good faith efforts have been made and to discuss the matter. Failure to respond to the notice may be taken as an admission that no valid explanation exists. If, after consideration of all the pertinent data, the Contracting Officer finds that the Contractor failed to make a good faith effort to comply with the subcontracting plan, the Contracting Officer shall issue a final decision to that effect and require that the Contractor pay the Government liquidated damages as provided in paragraph (b) of this clause.

(d) With respect to commercial plans, the Contracting Officer who approved the plan will perform the functions of the Contracting Officer under this clause on behalf of all agencies with contracts covered by the commercial plan.

(e) The Contractor shall have the right of appeal, under the clause in this contract entitled Disputes, from any final decision of the Contracting Officer.

(f) Liquidated damages shall be in addition to any other remedies that the Government may have.

(End of clause)

(End of Summary of Changes)

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SCHEDULE

<u>Item No.</u>	<u>Description of Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Amount</u>
BASE ITEMS - Capping in RA1, Dredging, and Outfall Extension					
0001	All Work for Mobilization and Demobilization	1	JOB	LS	\$ _____
0002	Remedial Action Management Plan	1	JOB	LS	\$ _____
0003	All Work for PSR Marine Sediments Unit Remedial Action - Capping in RA1, Dredging, and Outfall Extension, except for Item Nos. 0001, 0002, and 0004 through 0018, including site preparation and development	1	JOB	LS	\$ _____
0004	Dredging and Disposal at Subtitle "D" Landfill	10,000	CY	\$ _____	\$ _____
0005	Sand Cap Mix	27,300	TON	\$ _____	\$ _____
0006	Gravel Mix	85,300	TON	\$ _____	\$ _____
0007	Filter Material No. 1	700	TON	\$ _____	\$ _____
0008	Filter Material No. 2	2,900	TON	\$ _____	\$ _____
0009	Riprap	12,200	TON	\$ _____	\$ _____
0010	Beach Sand	1,000	TON	\$ _____	\$ _____
0011	Habitat Mix	6,900	TON	\$ _____	\$ _____
0012	Shoreline Restoration	1	JOB	LS	\$ _____
0013	Water Quality Monitoring	1	JOB	LS	\$ _____
0014	Cap Verification Sampling and Analysis	1	JOB	LS	\$ _____
0015	Longfellow Creek Outfall Extension and Outfall Grouting	1	JOB	LS	\$ _____

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SCHEDULE

<u>Item No.</u>	<u>Description of Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Amount</u>
0016	Pre-Construction Multi-Beam Hydrographic Survey	1	JOB	LS	\$ _____
0017	Land Surveying and Single-Beam Hydrographic Surveys	1	JOB	LS	\$ _____
0018	Record Drawing and Closeout Documentation	1	JOB	LS	\$ _____
TOTAL FOR BASE ITEMS 0001 THROUGH 0018					\$ _____
GENERAL OPTION ITEMS					
0019	Disposal at Subtitle "C" Landfill				
0019AA	First 10 Tons	10	TON	\$ _____	\$ _____
0019AB	All over 10 Tons	90	TON	\$ _____	\$ _____
0020	Additional Cap Verification Sampling and Analysis	30	EACH	\$ _____	\$ _____
0021	Standby for Site Access	10	DAY	\$ _____	\$ _____
0022	All Work for Additional Demobilization and Remobilization	1	JOB	LS	\$ _____
OPTION ITEMS - Capping in RA2a and RA3					
0023	All Work for PSR Marine Sediments Unit Remedial Action - Capping in RA2a and Capping in RA3, except for Item Nos. 0024 through 0030, including site preparation and development	1	JOB	LS	\$ _____
0024	Sand Cap Mix	38,600	TON	\$ _____	\$ _____
0025	Coarse Sand	32,800	TON	\$ _____	\$ _____
0026	Gravel Mix	5,500	TON	\$ _____	\$ _____
0027	Water Quality Monitoring	1	JOB	LS	\$ _____

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SCHEDULE

<u>Item No.</u>	<u>Description of Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Amount</u>
0028	Cap Verification Sampling and Analysis	1	JOB	LS	\$ _____
0029	Single-beam Hydrographic Surveys	1	JOB	LS	\$ _____
0030	Record Drawing and Closeout Documentation	1	JOB	LS	\$ _____
OPTION ITEMS - Capping in RA2b and RA4					
0031	All Work for PSR Marine Sediments Unit Remedial Action - Capping in RA2b and Capping in RA4, except for Item Nos. 0032 through 0037, including site preparation and development	1	JOB	LS	\$ _____
0032	Sand Cap Mix	266,100	TON	\$ _____	\$ _____
0033	Water Quality Monitoring	1	JOB	LS	\$ _____
0034	Cap Verification Sampling and Analysis	1	JOB	LS	\$ _____
0035	Single-beam Hydrographic Surveys	1	JOB	LS	\$ _____
0036	Sediment Profile Imaging Surveys				
0036AA	First <u>4</u> surveys	4	EACH	\$ _____	\$ _____
0036AB	All over <u>4</u> surveys	4	EACH	\$ _____	\$ _____
0037	Record Drawing and Closeout Documentation	1	JOB	LS	\$ _____
OPTION ITEM - Post-Construction Survey					
0038	Post-Construction Multi-Beam Hydrographic Survey	1	JOB	LS	\$ _____
TOTAL FOR OPTION ITEMS 0019 THROUGH 0038					\$ _____
TOTAL FOR ALL ITEMS 0001 THROUGH 0038					\$ _____

Notes: CY - cubic yards

EA - each

LS - lump sum

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REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
SEATTLE DISTRICT, CORPS OF ENGINEERS
P.O. BOX 3755
SEATTLE, WASHINGTON 98124-3755

Contracting Division

REV Nov 19, 2002

SUBJECT: DACW67-03-R-0003, Pacific Sound Resources Superfund Site, Marine Sediment Unit, Seattle, Washington,

NOTICE TO LARGE BUSINESS FIRMS: (RFP)

Your attention is directed to the contract clauses entitled "Utilization of Small Business Concerns (Oct 2000) (52.219-0008) and "Small Business Subcontracting Plan" (Jan 2002) (52.219-0009II), which are included in this solicitation. If you are a large business, and your offer is **\$1,000,000** or more you are required to submit a subcontracting plan **with** your proposal. Award will not be made under this solicitation without a subcontracting plan approved by the Contracting Officer.

DEFINITIONS: "Subcontract" means any agreement (other than one involving an employer-employee relationship) entered into by a Federal Government prime contractor or subcontractor calling for supplies and/or services required for performance of the contract or subcontract.

For your information, we consider the following goals reasonable and achievable during the performance of the contract resulting from this solicitation. However, final goals will be negotiated prior to contract award. The Subcontracting Plan will then become a material part of your contract.

- a. 65% of planned subcontracting dollars can be placed with all small business concerns.
- b. 10% of planned subcontracting dollars can be placed with those small business concerns owned and controlled by socially and economically disadvantaged individuals or Historically Black Colleges and Universities or Minority Institutions. NOTE: b. is a subset of a.
- c. 5% of planned subcontracting dollars for small women-owned businesses. NOTE: c. is a subset of a. Also, the women-owned business may meet the definition of a small disadvantaged business. If so, c. will also be a subset of a. (Count firm in all applicable areas.)
- d. 3% of planned subcontracting dollars may be placed with HUBZone small business concerns. NOTE: d. is a subset of a. Note: A HUBZone firm may also SDB, women-owned and/or veteran-owned. Count firm in all applicable areas).
- e. 3% of planned subcontracting dollars for veteran-owned small business. NOTE: e. is a subset of a. Go to <http://www.va.gov/osdbu/vetctr.htm> or <http://www.sba.gov/VETS/> for questions concerning the Veterans Business Development program.
- f. 2% of planned subcontracting dollars may be placed with service-disabled veteran-owned small business. NOTE: f. is a subset of a. and e.

Goals included in any proposed plan submitted by you should be at least equal to the ones we are recommending. If lesser goals are proposed, you will have to explain how those goals and your plan represent your best efforts to comply with the policy outlined in the contract clauses. There are a number of equally important aspects of the plan. You should familiarize yourself with the requirements set forth in the contract clauses relating to the subcontracting plan before submitting a proposal.

Your plan will be reviewed and scored in accordance with AFARS Appendix D to ensure it clearly represents your firm's ability to carry out the terms and conditions set forth in the contract clauses. A Subcontracting Plan with a score of less than 70 may not be accepted. It is recommended that you use the enclosed example **as a guide to**

assist you in developing your own subcontracting plan/program. The example is intended to assist you in developing your own subcontracting plan/program. Delete the instructions shown in parenthesis or your plan for subcontracting to small business will not be approved. If discussions during the evaluation of your subcontracting program raises doubts as to your intentions or ability to comply with FAR clause 52.219-9 it could result in your ineligibility for award.

Your plan must address how you will maximize subcontracting opportunities with the small business communities to be found within the project location. Demonstrated outreach efforts through conference attendance, use of ProNet, Corporate support of your Small Business Program Liaison Officer and Small Business Program must be addressed in your subcontracting plan.

Your Small Business Program Managers' attendance at DOD Regional Council Meetings for Small Business Education and Advocacy will be a contract requirement. **DOD Policy Guidance:** In accordance with the Small Business Act, it is the policy of the federal government to aid, assist, and counsel small business to ensure that a fair share of contracts are awarded to small business. Consistent with this, it is the policy of DOD to sponsor regional councils as one significant way to aid, assist, and counsel large business through education and advocacy *of its members who are charged with the responsibility of fulfilling this federal policy.* Therefore, be advised that the individual listed in paragraph 7 of the example will be required to attend these regional council meetings and that attendance must be addressed in your subcontracting plan. Contact at (425) 889-7318 for information relating to upcoming training opportunities. Your plan must be submitted with your price proposal.

Should you have any questions or need assistance in DEVELOPING YOUR SUBCONTRACTING PLAN please call the undersigned at (206) 764-6807. If you need TECHNICAL ASSISTANCE call Esther Elson at (206) 764-6588.

Enclosure

Sincerely,



Susan C. Price
Deputy for Small Business

NOTE: This is an example plan. You may use this example as a guide in developing your own small business program. Delete all the instructions (parenthesis), including this message, or your plan will be returned.

SMALL BUSINESS SUBCONTRACTING PLAN

DATE:

CONTRACTOR:

ADDRESS:

PHONE NO:

PROJECT TITLE:

SOLICITATION NO:

1. In accordance with the contract clauses at 52.219-8 and 52.219-9, (name of contractor) submits the following Subcontracting Plan for Small, Small Disadvantaged, and Women-owned Business Concerns.

2. Corresponding dollar values for percentages cited in para. 3 for the base period only:

- a. Total contract amount is \$ _____.
- b. Total dollars planned to be subcontracted (to all types of businesses): \$ _____.
- c. Total dollars planned to be subcontracted to small business concerns (including 2d, 2e, 2f, 2g, and 2h below):
\$ _____.
- d. Total dollars planned to be subcontracted to small disadvantaged business concerns: \$ _____.
- e. Total dollars planned to be subcontracted to small woman-owned business concerns: \$ _____.
- f. Total dollars planned to be subcontracted to HUBZone small business: \$ _____.
- g. Total dollars planned to be subcontracted to veteran-owned small business concerns \$ _____.
- h. Total dollars planned to be subcontracted to service-disabled veteran-owned small business concerns.
\$ _____.

3. The following percentage goals (expressed in terms of a percentage of total planned subcontracting dollars) are applicable to the contract awarded under the solicitation cited above.

a. Small Business Concerns (2c divided by 2b): _____% of total planned subcontracting dollars under this contract will go to subcontractors who are small business concerns including 3c through 3e.

b. Small Disadvantaged Business Concerns (2d divided by 2b): _____% of total planned subcontracting dollars under this contract will go to subcontractors who are small disadvantaged individuals. (**NOTE: SDB firms must be certified by SBA** and meet the definition under clause 52.219-8(c)(3)).

c. Small Woman-Owned Business Concerns (2e divided by 2b): _____% of total planned subcontracting dollars under this contract will go to subcontractors who are small woman-owned businesses

d. Small HUBZone Business Concerns (2f divided by 2b): _____% of total planned subcontracting dollars under this contract will go to subcontractors who are HUBZone small business contractors. (SEE the definition in contract clause 52.219-8(c) or use the internet: <http://www.sba.gov/hubzone/> for further information.)

e. Veteran-owned small business concerns (2g divided by 2b): _____% of total planned subcontracting dollars under this contract will go to subcontractors who are veteran-owned small business.

f. Service-disabled veteran-owned small business concerns (2h divided by 2b): _____% of total planned subcontracting dollars under this contract will go to subcontractors who are service-disabled veteran-owned small business.

4. The principal items or areas we will subcontract under this contract are:

a. Of the items or areas stated in 4; the following are planned to be subcontracted to Small Businesses (LIST THE NAME AND RESPONSIBILITY OF FIRM):

b. Of the items or areas stated in 4.a; the following are planned to be subcontracted to Small Disadvantaged Businesses (LIST THE NAME AND RESPONSIBILITY OF FIRM):

c. Of the items or areas stated in 4.a; the following are planned to be subcontracted to Small Women-Owned Businesses (LIST THE NAME AND RESPONSIBILITY OF FIRM):

d. Of the items or areas stated in 4.a; the following are planned to be subcontracted to HUBZone small business concerns (LIST THE NAME AND RESPONSIBILITY OF FIRM):

e. Of the items or areas stated in 4.a; the following are planned to be subcontracted to Veteran-owned Small Business concerns (LIST THE NAME AND RESPONSIBILITY OF FIRM):

f. Of the items or areas stated in 4.a; the following are planned to be subcontracted to Service-disabled veteran-owned small business concerns (LIST THE NAME AND RESPONSIBILITY OF FIRM):

****NOTE: SEE LAST PAGE IF THIS SOLICITATION HAS OPTION YEARS OR PERIODS (DELETE THIS STATEMENT FROM YOUR PLAN)****

5. Provide a description of the method your firm used to develop the subcontracting goals in paragraph 3:

6. Indirect costs were () were not () used in establishing subcontracting goals. **If indirect costs are included in your goals, furnish a description of the method used to determine the proportionate share of indirect costs to be incurred with (i) small business concerns (ii) small disadvantaged business concerns (iii) women-owned small business concerns (iv) HUBZone small business concerns (v) Veteran-owned small business concerns and (vi) Service-disabled veteran-owned concerns **

7. The following individual will administer (name of contractor) Subcontracting Program:

(NOTE TO OFFERORS: The individual named here will be expected to perform and manage your plan and contract clause 52.219-9). Site Construction project managers may not be acceptable as your small business advocate that manages your Corporate Small Business Program).

Name: _____ Job Title: _____
Address and Telephone Number: _____

This individual's specific duties with regard to the conduct of our firm's Subcontracting Plan will include, but will not be limited to, the following:

a. Developing and maintaining bidders lists of small business, HUBZone small business, small disadvantaged business and women-owned small business concerns using sources such as the Small Business Administration's ProNet (<http://pro-net.sba.gov/>) Washington State Office of Minority and Women-owned Business Enterprises (<http://www.wsdot.wa.gov/omwbe/>) Minority Business Development Agency, US Department of Commerce, Local Minority Business Development Centers, Economic Development Centers, and National Center for American Indian Enterprise Development.

b. Assuring the inclusion of small business concerns, small disadvantaged business concerns, women-owned small business concerns, HUBZone small business concerns, veteran-owned small business concerns and service-disabled veteran-owned small business concerns in all solicitations for products or services which they are capable of providing; and ensuring that all solicitations are structured to permit the maximum possible participation by small business concerns, small disadvantaged business concerns, women-owned small business concerns, HUBZone small business concerns, veteran-owned small business concerns and service-disabled veteran-owned small business concerns.

c. Establishing and maintaining records of all solicitations and subcontract awards to ensure that the members of the firm who review bidders proposals documents their reasons for selecting or not selecting a bid submitted by a small business concerns, small disadvantaged business concerns, women-owned small business concerns, HUBZone small business concerns, veteran-owned small business concerns and service-disabled veteran-owned small business concerns.

d. Preparing and submitting the Subcontracting Report for Individual Contracts (SF 294) and the Summary Subcontract Report (SF 295) in accordance with instructions provided, and coordinating and preparing for all compliance reviews by Federal agencies.

e. Attendance at DOD sponsored training programs in order to develop guidance and training to firm personnel on the policy of the federal government to aid, assist, and counsel small business under this and other government contracts.

f. Conducting or arranging for all other activities necessary to further the intent and attainment of the goals in the Plan to include motivational training of the firm's purchasing personnel, attendance at workshops, seminars and trade fairs conducted by or on behalf of small business concerns, small disadvantaged business concerns, women-owned small business concerns, HUBZone small business concerns, veteran-owned small business concerns and service-disabled veteran-owned small business concerns.

8. The following steps will be taken to ensure that small business concerns, small disadvantaged business concerns, women-owned small business concerns, HUBZone small business concerns, veteran-owned small business concerns and service-disabled veteran-owned small business concerns receive notice of and have an equitable opportunity to compete for intended awards of subcontracts and/or purchase orders for the products and/or services describe in paragraph 4 above:

a. Sources will be requested through SBA's ProNet system, business development organizations, minority and small business trade associations and at small, minority, veteran small business and women-owned small business procurement conferences; sources will be contacted; and bidding materials will be provided to all responding parties expressing an interest.

b. Internally, motivational training will be conducted to guide and encourage purchasing personnel; source lists and guides to small business concerns, small disadvantaged business concerns, women-owned small business concerns, HUBZone small business concerns, veteran-owned small business concerns and service-disabled veteran-owned small business concerns will be maintained and utilized by purchasing personnel while soliciting subcontracts and purchase orders; activities will be monitored to ensure sufficient time is allowed for interested bidders to prepare their proposals and to evaluate continuing compliance with the Subcontracting Plan.

9. [Name of contractor] agrees that the clause entitled "Utilization of Small Business Concerns" (Oct 2000) will be included in all subcontracts that offer further subcontracting opportunities. All subcontractors, except small business concerns, who receive subcontracts in excess of \$500,000 (\$1,000,000 in the case of construction) will be required to adopt a subcontracting plan that complies with the requirements of this clause. Such plans will be reviewed to assure that all minimum requirements of an acceptable subcontracting plan have been satisfied.

10. (Name of contractor) agrees to submit such periodic reports and cooperate in any studies or surveys as may be required by the Contracting agency or Small Business Administration in order to determine the extent of compliance by the offeror with the subcontracting plan and with the clause entitled "Utilization of Small Business Concerns" contained in the contract.

11. (Name of Contractor) agrees to maintain at least the following types of records to document compliance with the Subcontracting Plan:

a. The names of all organizations, agencies, and associations contacted for small business concerns, small disadvantaged business concerns, women-owned small business concerns, HUBZone small business concerns,

veteran-owned small business concerns and service-disabled veteran-owned small business concerns along with records of attendance at conferences, seminars and trade fairs where additional sources were developed.

b. Source lists, guides, and other data identifying small business concerns, small disadvantaged business concerns, women-owned small business concerns, HUBZone small business concerns, veteran-owned small business concerns and service-disabled veteran-owned small business concerns.

c. Records on all subcontract solicitations resulting in an award of more than \$100,000 on a contract-by-contract basis, indicating (1) whether small business concerns were solicited, and if not, why not; (2) whether veteran-owned small business concerns were solicited, and if not, why not; (3) whether service-disabled veteran-owned small business concerns were solicited, and if not, why not; (4) whether HUBZone small business were solicited, and if not, why not; (5) whether small disadvantaged business concerns were solicited, and if not, why not; and (6) whether small women-owned business concerns were solicited, and if not, why not; and (7) reasons for the failure of solicited small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBzone small business concerns, small disadvantaged business concerns, and women-owned small business concerns to receive a subcontract award.

d. Records of all subcontract award data to include subcontractor's name and address, to be kept on a contract-by-contract basis .

e. Minutes of internal motivational and training meetings held for the guidance and encouragement of purchasing personnel, and records of all monitoring activities performed for compliance evaluation.

f. Copies of SF 294 and SF 295 showing date and place of filing and copies of all other reports or results of reviews conducted by the contracting agency or other interested agencies of the Federal government to monitor our compliance with this Subcontracting Plan.

12. (Name of Contractor) will submit a SF 295, Summary Subcontract Report, on Corps of Engineers projects only. The SF 295 shall be completed and distributed in accordance with the Corps of Engineers Supplemental Instructions. (Name of Contractor) will not report Corps of Engineers projects through any other Agency unless authorized by the Contracting Officer.

13. In closing, (Name of contractor) states that it will be the policy of (Name of contractor) to afford every practicable opportunity for small business concerns, small disadvantaged business concerns, women-owned small business concerns, HUBZone small business concerns, veteran-owned small business concerns and service-disabled veteran-owned small business concerns to participate in contracts awarded to (Name of contractor) by the Federal Government, to ensure that equitable opportunity is provided small business concerns, small disadvantaged business concerns, women-owned small business concerns, HUBZone small business concerns, veteran-owned small business concerns and service-disabled veteran-owned small business concerns to compete for award of subcontracts and purchase orders, and to diligently pursue the achievement of our goals of participation by small business concerns, small disadvantaged business concerns, women-owned small business concerns, HUBZone small business concerns, veteran-owned small business concerns and service-disabled veteran-owned small business concerns in the dollars available for subcontract/purchase order awards under this contract.

BY: _____

Signature and Title of CEO
Company Name

DATE: _____

NOTE: If this solicitation has options (or option periods) , the plan must contain separate goals for *each* option or option period (year). EXAMPLE:

	<u>Dollars</u>	<u>Percentage</u>
1. Optional Yr _____ total:	\$ _____	_____
2. Total to be subcontracted to all types of businesses:	\$ _____	_____
a. Subcontracted to Small Business (including b, c, d, e, and f below):	\$ _____	_____
b. Subcontracted to Small Disadvantaged Businesses:	\$ _____	_____
c. Subcontracted to Women-Owned Small Businesses:	\$ _____	_____
d. Subcontracted to HUBzone concerns	\$ _____	_____
e. Subcontracted to Veteran-owned Small Business:	\$ _____	_____
f. Subcontracted to Service-disabled Small Business	\$ _____	_____
1. Optional Yr _____ total:	\$ _____	_____
2. Total to be subcontracted to all types of businesses:	\$ _____	_____
a. Subcontracted to Small Business (including b, c, d, e, and f below):	\$ _____	_____
b. Subcontracted to Small Disadvantaged Businesses:	\$ _____	_____
c. Subcontracted to Women-Owned Small Businesses:	\$ _____	_____
d. Subcontracted to HUBzone concerns	\$ _____	_____
e. Subcontracted to Veteran-owned Small Business:	\$ _____	_____
f. Subcontracted to Service-disabled Small Business	\$ _____	_____

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02036

Pacific Sound Resources Superfund Site, Marine Sediment Unit, Seattle, Washington

SPECIAL CLAUSES

SC-1. COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK (APR 1984) (FAR 52.211-10).

(a) The Contractor shall be required to (1) commence work under this Contract within 10 calendar days after the date the Contractor receives the notice to proceed, (2) prosecute the work diligently, and (3) complete the entire work ready for use not later than the calendar date or number of calendar days (as specified) after the date the Contractor receives notice to proceed set forth in the Schedule below. The time stated for completion shall include final cleanup of the premises.

SC-1.1 COMPLETION SCHEDULE

Item of Work ⁽ⁱ⁾	Completion Time
(1a) Base Items 0001 through 0015	Complete all work by 14 February 2004
(1b) Base Items 0016 and 0017	Complete all work by 15 March 2004
(1c) Base Item 0018	See Section 01115, Paragraph 1.5.1 l
(2a) Optional Items 0023 through 27	Complete all work by 14 February 15 November 2005
(2b) Optional Items 0028 and 29	Complete all work by 15 December March 2005
(2c) Optional Item 0030	See Section 01115, Paragraph 1.5.1 l
(3a) Optional Items 0031 through 33	Complete all work by 14 February 15 November 2005
(3b) Optional Items 0034 through 36	Complete all work by 15 December March 2005
(3c) Optional Item 0037	See Section 01115, Paragraph 1.5.1 l
(4) Optional Item 0038	30 ⁽ⁱⁱ⁾

⁽ⁱ⁾ Any item(s) not listed are subject to completion by the end of the remaining contract period when awarded but not less than 30 calendar days.

⁽ⁱⁱ⁾ In calendar days after receipt of notice to proceed for option.

(b) The work is subject to the phasing and completion requirements specified under Section 01145, SITE SPECIFIC SUPPLEMENTARY REQUIREMENTS.

SC-1.2 OPTION FOR INCREASED QUANTITY

a. The Government may increase the quantity of work awarded by exercising one or more of the Optional Bid Item(s) 0019 through 0038 at any time, or not at all, but no later than the following periods set forth below for the specified item(s):

i. The Government may exercise the Optional Contract Line Items 0019 through 0021, and 0038 at any time during the life of the contract without prior notice to the Contractor, including any extensions.

ii. The Government may exercise the Optional Contract Line Item 0022, no later than 15 March 2004, including any extensions.

iii. The Government may exercise any one or more of the Optional Contract Line Items 0023 through 0037, no later than 365 calendar days after contract award, including any extensions.

b. Notice to proceed on work Item(s) added by exercise of the option(s) will be given upon execution of consent of surety.

c. The parties hereto further agree that any option herein shall be considered to have been exercised at the time the Government deposits written notification to the Contractor in the mails.

d. The time allowed for completion of any optional items awarded under this contract is specified under SC-1.1 and, when applicable, the completion time will be measured from the date of receipt of the notice to proceed for the respective optional item(s).

SC-2. LIQUIDATED DAMAGES - CONSTRUCTION (SEP 2000) (FAR 52.211-12)

(a) If the Contractor fails to complete the work within the time specified in the Contract, or any extension, the Contractor shall pay to the Government as liquidated damages, the sums set forth below for each day of delay until the work is completed or accepted.

(1) All Work Specified in Paragraph SC-1.1 (1a) & (1b)	\$ 1,386.00
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(2) All Work Specified in Paragraph SC-1.1 (2a) & (2b)	\$ 1,386.00
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(3) All Work Specified in Paragraph SC-1.1 (3a) & (3b)	\$ 1,386.00
--	-------------

(4) All Work Specified in Paragraph SC-1.1 (4)	\$ 1,386.00
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(5) All Work Specified in Paragraph SC-1.1 (1c), (2c), & (3c)	Not applicable
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(6) Liquidated damages under this contract shall in no event exceed a total of \$ 1,386.00 per day, even if the Contractor is delinquent at any one time in completing more than one of the combinations of work under SC-1.1 (1) through (4).

(b) If the Government terminates the Contractor's right to proceed, the resulting damages will continue to accrue until the work is completed. These liquidated damages are in addition to excess cost of repurchase under the Termination clause of the CONTRACT CLAUSES.

SC-3. TIME EXTENSIONS (Sept 2000) (FAR 52.211-13): Time extensions for contract changes will depend upon the extent, if any, by which the changes cause delay in the completion of the various elements of construction. The change order granting the time extension may provide that the Contract completion date will be extended only for those specific elements related to the changed work and that the remaining contract completion dates for all other portions of the work will not be altered. The change order also may provide an equitable readjustment of liquidated damages under the new completion schedule.

SC-4. VARIATIONS IN ESTIMATED QUANTITIES - SUBDIVIDED ITEMS (MAR 1995) (EFARS 52.211-5001): This variation in estimated quantities clause is applicable only to Item Nos. 0019 and 0036.

(a) Variation from the estimated quantity in the actual work performed under any second or subsequent sub-item or elimination of all work under such a second or subsequent sub-item will not be the basis for an adjustment in contract unit price.

(b) Where the actual quantity of work performed for the specified item nos. is less than 85 % of the quantity of the first sub-item listed under such item, the Contractor will be paid at the contract unit price for that sub-item for the actual quantity of work performed and, in addition, an equitable adjustment shall be made in accordance with the clause FAR 52.211-18, Variation in Estimated Quantities.

(c) If the actual quantity of work performed under the specified item nos. exceeds 115 percent or is less than 85 percent of the total estimated quantity of the sub-item under that item and/or if the quantity of the work performed under the second sub-item or any subsequent sub-item under for the specified item nos. exceeds 115 % or is less than 85 % of the estimated quantity of any such sub-item, and if such variation causes an increase or a decrease in the time required for performance of this contract the contract completion time will be adjusted in accordance with the clause FAR 52.211-18, Variation in Estimated Quantities.

SC-5. INSURANCE - WORK ON A GOVERNMENT INSTALLATION (JAN 1997) (FAR 52.228-5)

(a) The Contractor shall, at its own expense, provide and maintain during the entire performance period of this Contract at least the kinds and minimum amounts of insurance required in the Insurance Liability Schedule or elsewhere in the Contract.

(b) Before commencing work under this Contract, the Contractor shall certify to the Contracting Officer in writing that the required insurance has been obtained. The policies evidencing required insurance shall contain an endorsement to the effect that any cancellation or any material change adversely affecting the Government's interest shall not be effective:

- (1) for such period as the laws of the State in which this Contract is to be performed prescribe;
or
(2) until 30 days after the insurer or the Contractor gives written notice to the Contracting Officer, whichever period is longer.

(c) The Contractor shall insert the substance of this clause, including this paragraph (c), in subcontracts under this Contract that require work on a Government installation and shall require subcontractors to provide and maintain the insurance required in the Schedule or elsewhere in the

Contract. The Contractor shall maintain a copy of all subcontractors' proofs of required insurance, and shall make copies available to the Contracting Officer upon request.

SC-5.1 REQUIRED INSURANCE IN ACCORDANCE WITH FAR 28.307-2:

(1) Workers' compensation and employer's liability. Contractors are required to comply with applicable Federal and State workers' compensation and occupational disease statutes. If occupational diseases are not compensable under those statutes, they shall be covered under the employer's liability section of the insurance policy, except when Contract operations are so commingled with a Contractor's commercial operation that it would not be practical to require this coverage. Employer's liability coverage of at least \$100,000 shall be required, except in states with exclusive or monopolistic funds that do not permit workers' compensation to be written by private carriers.

(2) General Liability.

(a) The Contracting Officer shall require bodily injury liability insurance coverage written on the comprehensive form of policy of at least \$500,000 per occurrence.

(b) Property damage liability insurance shall be required only in special circumstances as determined by the agency.

(3) Automobile liability. The Contracting Officer shall require automobile liability insurance written on the comprehensive form of policy. The policy shall provide for bodily injury and property damage liability covering the operation of all automobiles used in connection with performing the Contract. Policies covering automobiles operated in the United States shall provide coverage of at least \$200,000 per person and \$500,000 per occurrence for bodily injury and \$20,000 per occurrence for property damage. The amount of liability coverage on other policies shall be commensurate with any legal requirements of the locality and sufficient to meet normal and customary claims.

(4) Aircraft public and passenger liability. When aircraft are used in connection with performing the Contract, the Contracting Officer shall require aircraft public and passenger liability insurance. Coverage shall be at least \$200,000 per person and \$500,000 per occurrence for bodily injury, other than passenger liability, and \$200,000 per occurrence for property damage. Coverage for passenger liability bodily injury shall be at least \$200,000 multiplied by the number of seats or passengers, whichever is greater.

(5) Vessel liability. When Contract performance involves use of vessels, the Contracting Officer shall require, as determined by the agency, vessel collision liability and protection and indemnity liability insurance.

(6) Environmental Liability. If this contract includes the transport, treatment, storage, or disposal of hazardous material waste the following coverage is required.

The Contractor shall ensure the transporter and disposal facility have liability insurance in effect for claims arising out of the death or bodily injury and property damage from hazardous material/waste transport, treatment, storage and disposal, including vehicle liability and legal defense costs in the amount of \$1,000,000.00 as evidenced by a certificate of insurance for General, Automobile, and Environmental Liability Coverage. Proof of this insurance shall be provided to the Contracting Officer.

SC-6. DELETED

SC-7. PERFORMANCE OF WORK BY THE CONTRACTOR (APR 1984) (FAR 52.236-1): The Contractor shall perform on the site, and with its own organization, work equivalent to at least fifteen percent (15%) of the total amount of work to be performed under the Contract. The percentage may be reduced by a supplemental agreement to this Contract if, during performing the work, the Contractor requests a reduction and the Contracting Officer determines that the reduction would be to the advantage of the Government.

SC-8. PHYSICAL DATA (APR 1984) (FAR 52.236-4): Data and information furnished or referred to below is for the Contractor's information. The Government will not be responsible for any interpretation of or conclusion drawn from the data or information by the Contractor.

(a) Physical Conditions: The indications of physical conditions on the drawings and in the specifications and attached technical exhibit are the result of site investigations, and include test holes and associated boring logs, and other geotechnical laboratory data and analytical data. Other data may be available in accordance with Section 01115 SITE DESCRIPTION.

(b) Weather Conditions: Each bidder shall be satisfied before submitting his bid as to the hazards likely to arise from weather conditions. Complete weather records and reports may be obtained from any National Weather Service Office.

(c) Transportation Facilities: Each bidder, before submitting his bid, shall make an investigation of the conditions of existing public and private roads and of clearances, restrictions, bridge load limits, and other limitations affecting transportation and ingress and egress at the jobsite. The unavailability of transportation facilities or limitations thereon shall not become a basis for claims for damages or extension of time for completion of the work.

(d) Right-of-Way: The right-of-way for the work covered by these specifications will be furnished by the Government. The Contractor may use such portions of the land within the right-of-way not otherwise occupied as may be designated by the Contracting Officer. The Contractor shall, without expense to the Government, and at any time during the progress of the work when space is needed within the right-of-way for any other purposes, promptly vacate and clean up any part of the grounds that have been allotted to, or have been in use by, him when directed to do so by the Contracting Officer. The Contractor shall keep the buildings and grounds in use by him at the site of the work in an orderly and sanitary condition. Should the Contractor require additional working space or lands for material yards, job offices, or other purposes, he shall obtain such additional lands or easements at his expense.

SC-9. QUANTITY SURVEYS (APR 1984) (FAR 52.236-16)

(a) Quantity surveys shall be conducted, and the data derived from these surveys shall be used in computing the quantities of work performed and the actual construction completed and in place.

(b) The Contractor shall conduct the original and final surveys and surveys for any periods for which progress payments are requested. All these surveys shall be conducted under the direction of a representative of the Contracting Officer, unless the Contracting Officer waives this requirement in a specific instance. The Government shall make such computations as are necessary to determine the quantities of work performed or finally in place. The Contractor shall make the computations based on the surveys for any periods for which progress payments are requested.

SC-10. LAYOUT OF WORK (APR 1984) (FAR 52.236-17): The Contractor shall lay out its work from Government-established base lines and bench marks indicated on the drawings, and shall be responsible for all measurements in connection with the layout. The Contractor shall furnish, at its own expense, all stakes, templates, platforms, equipment, tools, materials, and labor required to lay out any part of the work. The Contractor shall be responsible for executing the work to the lines and grades that may be established or indicated by the Contracting Officer. The Contractor shall also be responsible for maintaining and preserving all stakes and other marks established by the Contracting Officer until authorized to remove them. If such marks are destroyed by the Contractor or through its negligence before their removal is authorized, the Contracting Officer may replace them and deduct the expense of the replacement from any amounts due, or to become due, to the Contractor.

SC-11. RESERVED

SC-12. DELETED

SC-13. DELETED

SC-14. EQUIPMENT OWNERSHIP AND OPERATING EXPENSE SCHEDULE (MAR 1995)-
(EFARS 52.231-5000)

(a) This clause does not apply to terminations. See 52.249-5000, Basis for Settlement of Proposals and FAR Part 49.

(b) Allowable cost for construction and marine plant and equipment in sound workable condition owned or controlled and furnished by a contractor or subcontractor at any tier shall be based on actual cost data for each piece of equipment or groups of similar serial and series for which the Government can determine both ownership and operating costs from the contractor's accounting records. When both ownership and operating costs cannot be determined for any piece of equipment or groups of similar serial or series equipment from the contractor's accounting records, costs for that equipment shall be based upon the applicable provisions of EP 1110-1-8, Construction Equipment Ownership and Operating Expense Schedule, Region VIII. Working conditions shall be considered to be average for determining equipment rates using the schedule unless specified otherwise by the contracting officer. For equipment not included in the schedule, rates for comparable pieces of equipment may be used or a rate may be developed using the formula provided in the schedule. For forward pricing, the schedule in effect at the time of negotiations shall apply. For retroactive pricing, the schedule in effect at the time the work was performed shall apply.

(c) Equipment rental costs are allowable, subject to the provisions of FAR 31.105(d)(ii) and FAR 31.205-36. Rates for equipment rented from an organization under common control, lease-purchase arrangements, and sale-leaseback arrangements, will be determined using the schedule, except that actual rates will be used for equipment leased from an organization under common control that has an established practice of leasing the same or similar equipment to unaffiliated lessees.

(d) When actual equipment costs are proposed and the total amount of the pricing action exceeds the small purchase threshold, the contracting officer shall request the contractor to submit either certified cost or pricing data, or partial/limited data, as appropriate. The data shall be submitted on Standard Form 1411, Contract Pricing Proposal Cover Sheet.

(e) Copies of EP1110-1-8 "Construction Equipment Ownership and Operating Expense Schedule" Volumes 1 through 12 are available in Portable Document Format (PDF) and can be viewed or downloaded at <http://www.usace.army.mil/inet/usace-docs/eng-pamphlets/cecw.htm>. A CD-ROM containing (Volumes 1-12) is available through either the Superintendent of Documents or Government bookstores. For additional information telephone 202-512-2250, or access on the Internet at http://www.access.gpo.gov/su_docs.

SC-15. PAYMENT FOR MATERIALS DELIVERED OFF-SITE (MAR 1995)-(EFARS 52.232-5000)

(a) Pursuant to FAR clause 52.232-5, Payments Under Fixed Priced Construction Contracts, materials delivered to the contractor at locations other than the site of the work may be taken into consideration in making payments if included in payment estimates and if all the conditions of the General Provisions are fulfilled. Payment for items delivered to locations other than the work site will be limited to:

(1) materials required by the technical provisions; or (2) materials that have been fabricated to the point where they are identifiable to an item of work required under this contract.

(b) Such payment will be made only after receipt of paid or receipted invoices or invoices with canceled check showing title to the items in the prime contractor and including the value of material and labor incorporated into the item. In addition to petroleum products, payment for materials delivered off-site is limited to the following items: Any other construction material stored offsite may be considered in determining the amount of a progress payment.

SC-16. AND SC-17. DELETED

SC-18. CONTRACT DRAWINGS AND SPECIFICATIONS (AUG 2000)(DOD FAR SUPP 252.236-7001)

(a) The Government will provide to the Contractor, without charge, one set of contract drawings and specifications, except publications incorporated into the technical provisions by reference, in electronic or paper media as chosen by the Contracting Officer.

(b) The Contractor shall--

- (1) Check all drawings furnished immediately upon receipt;
- (2) Compare all drawings and verify the figures before laying out the work;
- (3) Promptly notify the Contracting Officer of any discrepancies;
- (4) Be responsible for any errors which might have been avoided by complying with this paragraph (b); and
- (5) Reproduce and print contract drawings and specifications as needed.

(c) In general—

- (1) Large scale drawings shall govern small scale drawings; and

(2) The Contractor shall follow figures marked on drawings in preference to scale measurements.

(d) Omissions from the drawings or specifications or the misdescription of details of work which are manifestly necessary to carry out the intent of the drawings and specifications, or that are customarily performed, shall not relieve the Contractor from performing such omitted or misdescribed details of the work. The Contractor shall perform such details as if fully and correctly set forth and described in the drawings and specifications.

(e) The work shall conform to the specifications and the contract drawings identified in the index of drawings attached at the end of the Special Clauses (Attachment A).

SC-19. THROUGH SC-22. DELETED

SC-23. RECOVERED MATERIALS: The Corps of Engineers encourages all bidders to utilize recovered materials to the maximum extent practicable. The attached APPENDIX R contains procurement guidelines for products containing recovered materials.

APPENDIX R

PART 247 - COMPREHENSIVE PROCUREMENT GUIDELINE FOR PRODUCTS CONTAINING RECOVERED MATERIALS

40 CFR Ch. 1 (9-1-99 Edition)

Subpart B-Item Designations

§ 247.10 Paper and paper products.

Paper and paper products, excluding building and construction paper grades.

§ 247.11 Vehicular products.

- (a) Lubricating oils containing re-refined oil, including engine lubricating oils, hydraulic fluids, and gear oils, excluding marine and aviation oils.
- (b) Tires, excluding airplane tire
- (c) Reclaimed engine coolants, excluding coolants used in non-vehicular applications.

247.12 Construction products.

- (a) Building insulation product including the following items:
 - (1) Loose-fill insulation, including but not limited to cellulose fiber, mineral fibers (fiberglass and rock vermiculite, and perlite;
 - (2) Blanket and batt insulation, including but not limited to mineral fibers (fiberglass and rock wool).
 - (3) Board (sheathing, roof decking wall panel) insulation, including but not limited to structural fiberboard and laminated paperboard products perlite composite board, polyurethane, polyisocyanurate, polystyrene, phenolics, and composites; and
 - (4) Spray-in-place insulation, including but not limited to foam-in-place polyurethane and polyisocyanurate and spray-on cellulose.
- (b) Structural fiberboard and laminated paperboard products for applications other than building insulation, including building board, sheathing shingle backer, sound deadening board, roof insulating board, insulating wallboard, acoustical and non-acoustical ceiling tile, acoustical and non-acoustical lay-in panels, floor underlayments, and roof overlay (cover board).
- (c) Cement and concrete, including concrete products such as pipe and block, containing coal fly as ground granulated blast furnace (GGBF) slag.
- (d) Carpet made of polyester fiber use in low- and medium-wear applications.
- (e) Floor tiles and patio block containing recovered rubber or plastic.
- (f) Shower and restroom dividers/partitions containing recovered plastic or steel.
- (g) (1) Consolidated latex paint used for covering graffiti; and
- (2) Reprocessed latex paint used for interior and exterior architectural applications such as wallboard, ceilings, and trim; gutter boards; and concrete, stucco, masonry, wood and metal surfaces.

§247.13 Transportation products.

- (a) Traffic barricades and traffic cones used in controlling or restricting vehicular traffic.

- (b) Parking stops made from concrete or containing recovered plastic or rubber.
- (c) Channelizers containing recovered plastic or rubber.
- (d) Delineators containing recovered plastic, rubber, or steel.
- (e) Flexible delineators containing recovered plastic.

§ 247.14 Park and recreation products

- (a) Playground surfaces and running tracks containing recovered rubber or plastic.
- (b) Plastic fencing containing recovered plastic for use in controlling snow or sand drifting and as a warning/safety barrier in construction or other applications.

247.15 Landscaping products.

- (a) Hydraulic mulch products containing recovered paper or recovered wood used for hydroseeding and as an over-spray for straw mulch in landscaping, erosion control, and soil reclamation.
- (b) Compost made from yard trimmings, leaves, and/or grass clippings for use in landscaping, seeding of grass or other plants on roadsides and embankments, as a nutritious mulch under trees and shrubs, and in erosion control and soil reclamation.
- (c) Garden and soaker hoses containing recovered plastic or rubber.
- (d) Lawn and garden edging containing recovered plastic or rubber.

§ 247.16 Non-paper office product.

- (a) Office recycling containers and office waste receptacles.
- (b) Plastic desktop accessories.
- (c) Toner cartridges.
- (d) Binders.
- (e) Plastic trash bags.
- (f) Printer ribbons.
- (g) Plastic envelopes.

§ 247.17 Miscellaneous products.

Pallets containing recovered wood, plastic, or paperboard.

END OF SECTION

SECTION 01145

SITE-SPECIFIC SUPPLEMENTARY REQUIREMENTS

PART 1 GENERAL

1.1 CONDUCT OF WORK

1.1.1 Coordination

Coordination with the U.S. Coast Guard (USCG), the Port of Seattle and on-site contractors shall be made through the Contracting Officer (CO) to assist the Contractor in performing the Work with a minimum of interference and inconvenience. The Contractor is responsible for site security, and there is a possibility that other contractors could be on-site for some of the work period. See paragraph 1.3 COORDINATION AND COOPERATION WITH OTHER CONTRACTORS AND USERS.

1.1.2 Key

The Contractor shall be responsible for Government-owned keys issued for access to facilities or areas pertinent to this Contract.

Upon completion of the Work in an area, or upon request of the CO, the key or keys relevant to the completed areas shall be returned.

Should the Contractor lose a key:

- a. The CO shall be notified, in writing, within 3 working days after the loss is discovered; and
- b. Should the key not be found before final acceptance, the final contract payment shall be reduced by \$100 for each key not returned.

1.1.3 Work and Material Delivery Hours

Except as noted in paragraph 1.4.2 Constraints, normal work hours in the project area shall be 7:00 a.m. to 6:00 p.m., Monday through Saturday, excluding holidays. Requests for alternate work schedules may be considered, but must be approved by the CO at least 48 hours in advance. Alternate work schedules may not be approved if a Government quality assurance inspector is not available to be on Site during the proposed work hours.

1.2 GENERAL ACCESS REQUIREMENTS

The project Site area is presently secured by fences and limited-access gates. The Contractor's work site includes stockpile and staging areas and other locations as needed to suit work force needs. Utilities will not be supplied by the Government. The Site may be

accessed by water from Elliott Bay and by road from Harbor Avenue via Florida Street or from Spokane Street via the fire lane, as shown on the Drawings.

1.2.1 Entry Gate

The upland Site is within a fenced area. The Contractor shall coordinate with the CO to gain entrance during working hours.

1.2.2 Irregular or Non-routine Access

Access on a regular basis and during other than established working hours will require prior approval by the CO. Irregular or non-routine access of Contractor personnel to the controlled areas during non-duty hours may be granted by the CO's designated representative.

1.2.3 Maintenance of Access

Except as required and approved by the CO, the Contractor shall not obstruct or interfere with access by others to existing facilities adjacent to the Site during Work conducted under this Contract.

1.2.4 Vehicles

Vehicles shall park only in approved areas in accordance with the parking plan submitted as part of the Remedial Action Management Plan (RAMP) in accordance with Section 01400.

1.3 PERSONNEL IDENTIFICATION

1.3.1 Employee Listing

The Contractor shall submit a complete listing of Contractor personnel, including job title and identification credential number, who will be working on the project. This listing shall be updated as needed to ensure that the Government has been notified of any changes of Contractor Personnel in advance of new personnel engaging in work on the project. The Government will allow access to the controlled areas of only the Contractor Personnel authorized in advance and included on the employee listing.

1.3.2 Identification Credentials

Contractor personnel shall either be issued a photo identification card (ID) by the Contractor or agree to provide their individual vehicle driver's license as an appropriate identification credential. In either case, the identification number shall be included on the listing required above. If the Contractor determines to issue ID cards to its employees, the following information shall be included:

Contractor Identification and Card Number Indicating Employees:

- | | | | |
|---|-------------------|---|------------|
| o | Full Name | o | Height |
| o | Current Address | o | Weight |
| o | Birth Date | o | Hair Color |
| o | Recent Photograph | o | Eye Color |

1.3.3 Employee Termination

If a Contractor employee resigns or is terminated the Contracting Officer, or designated representative shall be so notified at the earliest opportunity, but in no case later than the start of the succeeding workday.

1.3.4 Access Control

Contractor personnel shall be instructed to present identification credential upon request by proper authority as established by the Contracting Officer.

1.4 COORDINATION AND COOPERATION WITH OTHER CONTRACTORS AND USERS

1.4.1 Work by Others

Work by others is anticipated to be performed in the vicinity or adjacent to the Site in concurrence with the scheduled performance of Work under these Contract Documents.

The USACE may be directing other contractors to place dredged material in RA5 during the Work conducted under this Contract.

The Port of Seattle will contract for removal of wooden piling at the Site, with work anticipated in July - August 2004. The Port of Seattle and their tenants, including Crowley Marine Services, have ongoing operations around and within the Work area. The Contractor shall coordinate the Work with the CO to minimize conflicts and to maintain a cooperative effort in completion of the Work.

Tribal fishing is known to occur in and around the Work area. The CO will coordinate with the Tribal Fisheries departments to identify and resolve potential access conflicts. The CO may direct the Contractor to standby as described in paragraph 1.5.2 Constraints.

1.5 CONSTRUCTION SCHEDULE REQUIREMENTS

The Work shall be planned, scheduled, and performed in phases to complete the work within the requirements of these Contract documents. The phases are:

- a. RAMP preparation and approval;
- b. Mobilization;
- c. Dredging in RA1 and RA3;

- d. Nearshore work for RA1 (outfall extensions);
- e. Capping of RA1; and
- f. Demobilization within the first construction season.

If awarded, option items to be completed in the second construction season are capping in RA2a, RA2b, RA3, and RA4.

Of particular importance is the timely identification, testing, and approval of sediment cap material products following NTP. Following submission of the draft RAMP, the CO may direct the Contractor to proceed with testing and analysis of cap materials in accordance with Section 01450 CHEMICAL DATA QUALITY CONTROL and Section 02483 SEDIMENT CAP.

1.5.1 Milestones

The Contractor shall incorporate the following milestones into the work sequence, using as the basis for the timeline the number of calendar days:

<u>Base Items</u>	<u>Completion</u>
a. Draft RAMP Submittal following Notice To Proceed (NTP):	Not to Exceed (NTE) 45 days following NTP
b. Pre-Construction Testing Report, following approval by CO	NTE 45 days
c. Final RAMP Submittal following comments on Draft RAMP	NTE 25 days
d. Begin Site mobilization following approval of RAMP	NTE 7 days following approval of RAMP
e. Completion of pre-construction multi-beam survey, land survey and pre-dredge survey	NTE 14 days following approval of RAMP
f. Initiation of construction	NTE 21 days following approval of RAMP
g. Dredging in RA1 and RA3, including associated transportation and disposal	Complete by February 14, 2004
h. Shoreline restoration in RA1 and outfall extension	Complete by February 14, 2004
i. Capping in RA1	Complete by February 14, 2004

- | | |
|--|----------------------------------|
| j. Completion of all in-water construction | Complete by
February 14, 2004 |
| k. Completion of all final surveying and sampling activities | Complete by
March 15, 2004 |
| l. Record Drawing and closeout documentation, following completion of awarded Work | NTE 90 days |

Option Items

- | | |
|--|---|
| m. Capping in RA2a and RA3 | Complete by
November 15, 2005
February 14, 2005 |
| n. Capping in RA2b and RA4 | Complete by
November 15, 2005
February 14, 2005 |
| o. Completion of all in-water construction | Complete by
November 15, 2005
February 14, 2005 |
| p. Completion of all final surveying and sampling activities | Complete by
December 15, 2005
March 15, 2005 |
| q. Post-construction multi-beam hydrographic survey, following completion of capping | NTE 30 days |
| r. Record Drawing and closeout documentation, following completion of awarded Work | NTE 90 days |

1.5.2 Constraints

The following special constraints have been identified as having an impact on the performance of the Work. This is not intended to be a comprehensive list of constraints that will result from the execution of the Work, but as an aid to the Contractor in development of schedules and in executing the Work. Additional constraints may exist or develop as a result of required work execution or Contractor's proposed work methods or sequence. In any event, the Contractor is responsible for compliance with the requirements of the various specification sections and the work procedures and protection requirements contained therein and establishing all constraints associated with the work execution and incorporating them into work schedules and proposed construction activities.

- a. No dredging will be permitted within the fish window of February 14 to August 16. Capping will not be permitted within the fish window of February 14 to July 16. No additional payment items are included for fish windows.
- b. The CO will coordinate the construction schedule with tribal fisheries departments. Based on this coordination, there shall be no night placement of cap material should a conflict with tribal treaty fishing occur. Up to 5 days of standby each construction season may be required as directed by the CO. This standby is in addition to (and outside of) the fish windows in part a, above. This standby is a separate pay item.
- c. Contractor shall incorporate allowances for downtime or decreased productivity due to adverse weather conditions into the work schedule. No additional payment items are included for delays due to adverse weather. Requests for time extensions due to unusually severe weather shall conform to the requirements in Section 01140 SUPPLEMENTARY REQUIREMENTS.
- d. Underwater stockpiling of material will not be permitted.

1.6 PROTECTION OF PROPERTY

In addition to requirements of the Contract Clauses, the Contractor shall protect all property, Government or private, within or in the vicinity of the work Site. The Contractor shall ensure that it is not removed, damaged, destroyed, or prevented from its normal use unless so designated in the Contract Documents. All property adjacent to the Work shall be protected including, but not limited to, protection from construction generated dust, debris, water, and vibration. Property includes land, utilities, landscaping, markers and monuments, buildings, structures, site and drainage improvements, whether shown on the Drawings or not.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION

SECTION 01355

ENVIRONMENTAL PROTECTION

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only. The most recent version of the reference applies.

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA) CODE OF FEDERAL REGULATIONS (CFR)

33 CFR 328	Definitions
40 CFR 68	Chemical Accident Prevention Provisions
40 CFR 141	National Primary Drinking Water Regulations
40 CFR 260	Hazardous Waste Management System: General
40 CFR 261	Identification and Listing of Hazardous Waste
40 CFR 262	Standards Applicable to Generators of Hazardous Waste
40 CFR 279	Standards for the Management of Used Oil
40 CFR 300.440	Procedures for Planning and Implementing Off-Site Response Actions
40 CFR 302	Designation, Reportable Quantities, and Notification
40 CFR 355	Emergency Planning and Notification
49 CFR 171 - 178	Hazardous Materials Regulations

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1	(1996) U.S. Army Corps on Engineers Safety and Health Requirements Manual
WETLAND MANUAL	U.S. Army Corps of Engineers Wetlands Delineation Manual Technical Report Y-87-1

WASHINGTON STATE ADMINISTRATIVE CODE (WAC)

WAC 173-60	Maximum Environmental Noise Levels
WAC 173-62	Motor Vehicle Noise Performance Standards
WAC 173-216	State Waste Discharge Permit Program
WAC 173-201A-070	Water Quality Standards for Surface Water of the State of Washington
WAC 173-220	Point Source Discharges to Surface Water
WAC 173-303	Dangerous Waste Regulations
WAC 173-304	Minimum Functional Standards for Solid Waste Handling
WAC 173-340	Model Toxics Control Act Cleanup Regulation

WASHINGTON STATE DEPARTMENT OF ECOLOGY (ECOLOGY)

ECOLOGY 99-11 through 99-15	(August 2001) Stormwater Management Manual for Western Washington
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AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM D 4439	(2002) Standard Terminology for Geosynthetics
ASTM D 4491	(1999) Water Permeability of Geotextiles by Permittivity
ASTM D 4533	(1991; R 1996) Trapezoid Tearing Strength of Geotextiles
ASTM D 4632	(1991; R 1996)) Grab Breaking Load and Elongation of Geotextiles
ASTM D 4751	(1999) Determining Apparent Opening Size of a Geotextile
ASTM D 4873	(2002) Standard Guide for Identification, Storage, and Handling of Geosynthetic Rolls and Samples

1.2 DEFINITIONS

1.2.1 Environmental Pollution and Damage

Environmental pollution and damage is the presence of chemical, physical, or biological elements or agents which adversely affect human health or welfare; unfavorably alter ecological balances of importance to human life; affect other species of importance to humankind; or degrade the environment aesthetically, culturally and/or historically.

1.2.2 Environmental Protection

Environmental protection is the prevention/control of pollution and habitat disruption that may occur to the environment during construction. The control of environmental pollution and damage requires consideration of land, water, and air; biological and cultural resources; and includes management of visual aesthetics; noise; solid, chemical, gaseous, and liquid waste; as well as other pollutants.

1.2.3 Contractor-Generated Hazardous Waste

Contractor-generated hazardous waste means materials that, if abandoned or disposed of, may meet the definition of a hazardous waste. These waste streams would typically consist of material brought on Site by the Contractor to execute work, but are not fully consumed during the course of construction. Examples include, but are not limited to, excess paint thinners (i.e., methyl ethyl ketone, toluene etc.), waste thinners, excess paints, excess solvents, waste solvents, lubricants, fuels, and antifreeze.

1.2.4 Land Application for Discharge Water

The term "Land Application" for discharge water implies that the Contractor shall discharge water at a rate which allows the water to percolate into the soil. No runoff, soil erosion, discharge into storm sewers, discharge into defined drainage areas, or discharge into the "waters of the United States" shall occur. Land Application shall be in compliance with all applicable Federal, State, and local laws and regulations.

1.2.5 Surface Discharge

The term "Surface Discharge" implies that the water is discharged with possible runoff and subsequent soil erosion may occur. Waters that are surface discharged may terminate in drainage ditches, storm sewers, creeks, and/or "waters of the United States" and would require a permit to discharge water from the governing agency. (On-site discharges would not require a permit but would need to meet substantive permit requirements). "Surface Discharge" does not include dewatering liquids from dredged material, provided the dewatering liquids are return water from the dredging operation and are returned to the site waters during the course of dredging. "Surface Discharge" does not include surface water used to hydraulically wash cap materials off a barge.

1.2.6 Waters of the United States

All waters which are under the jurisdiction of the Clean Water Act, as defined in 33 CFR 328.

1.3 GENERAL REQUIREMENTS

The Contractor shall perform the Work minimizing environmental pollution and damage as the result of construction operations. The control of environmental pollution and damage requires consideration of land, water, and air and includes management of visual aesthetics, emissions, dust, noise, solid waste, liquid waste, as well as other pollutants. The environmental resources within the project boundaries and those affected outside the limits of permanent work shall be protected during the entire duration of this Contract. The Contractor shall comply with all applicable environmental Federal, State, and local laws and regulations. The Contractor shall be responsible for any delays resulting from failure to comply with environmental laws and regulations.

1.4 SUBCONTRACTORS

The Contractor shall ensure compliance with this Section by subcontractors.

1.5 SUBMITTALS

Government approval is required for submittals with a “GA” designation; submittals having an “FIO” designation are for information only. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES.

SD-01 Data

Filter Fabric Fence, FIO

The Contractor shall provide Manufacturer’s product data.

SD-09 Reports

Environmental Protection Plan; GA

The Contractor shall submit an Environmental Protection Plan with the RAMP in accordance with Section 01400 REMEDIAL ACTION MANAGEMENT PLAN.

SD-13 Certificates

Mill Certificate or Affidavit, GA

A mill certificate or affidavit shall be provided attesting that the fabric and factory seams meet chemical, physical, and manufacturing requirements specified herein.

1.6 ENVIRONMENTAL PROTECTION PLAN

The Contractor shall submit an Environmental Protection Plan as part of the RAMP in accordance with Section 01400 REMEDIAL ACTION MANAGEMENT PLAN, for review and approval by the Contracting Officer (CO). The purpose of the Environmental Protection Plan is to present a comprehensive overview of known or potential environmental issues which the Contractor must address during remedial action construction. Issues of concern shall be defined within the Environmental Protection Plan as outlined in this Section. The Contractor shall address each topic at a level of detail commensurate with the environmental issue and required construction task(s). Approval of the Contractor's plan will not relieve the Contractor of responsibility for adequate and continuing control of pollutants and other environmental protection measures including Spill Response. The Environmental Protection Plan shall be current and maintained on Site by the Contractor.

1.6.1 Compliance

No requirement in this Section shall be construed as relieving the Contractor of any applicable Federal, State, and local environmental protection laws and regulations. During construction, the Contractor shall be responsible for identifying, implementing, and submitting for approval any additional requirements to be included in the Environmental Protection Plan.

1.6.2 Contents

Contents of the Environmental Protection Plan are described in Section 01400 REMEDIAL ACTION MANAGEMENT PLAN.

1.7 PROTECTION FEATURES (PRECONSTRUCTION SURVEY)

This paragraph supplements the Contract Clause PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS. Prior to start of any onsite construction activities, the Contractor and the CO shall make a joint condition survey. Immediately following the survey, the Contractor shall prepare a brief report including a plan describing the features requiring protection under the provisions of the Contract Clauses, which are not specifically identified on the Drawings as environmental features requiring protection along with the condition of trees, shrubs and grassed areas immediately adjacent to the Site of Work and adjacent to the Contractor's assigned storage area and access route(s), as applicable. This survey report shall be signed by both the Contractor and the CO upon mutual agreement as to its accuracy and completeness. The Contractor shall protect those environmental features included in the survey report and any indicated on the Drawings, regardless of interference with which their preservation may cause to the Contractor's work under the Contract.

1.8 SPECIAL ENVIRONMENTAL REQUIREMENTS (NOT USED)

1.9 ENVIRONMENTAL ASSESSMENT OF CONTRACT DEVIATIONS

Any deviations, requested by the Contractor, from the Drawings and/or Specifications which may have an environmental impact will be subject to approval by the CO and may require an extended review, processing, and approval time. The CO reserves the right to disapprove alternate methods, even if they are more cost effective, if the CO determines that the proposed alternate method will have an adverse environmental impact.

1.10 NOTIFICATION

The CO will notify the Contractor in writing of any observed noncompliance with Federal, State or local environmental laws or regulations, permits, and other elements of the Contractor's Environmental Protection plan. The Contractor shall, after receipt of such notice, inform the CO of the proposed corrective action and take such action when approved by the CO. The CO may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No time extensions shall be granted or equitable adjustments allowed to the Contractor for any such suspensions. This is in addition to any other actions the CO may take under the Contract, or in accordance with the Federal Acquisition Regulation or Federal Law.

1.11 HAZARDOUS, TOXIC, AND RADIOACTIVE WASTE (HTRW) PERIMETER AIR MONITORING (NOT USED)

PART 2 PRODUCTS

2.1 COMPONENTS FOR SILT FENCES

2.1.1 The Contractor shall select filter fabric, silt fence stakes and posts, if required, to prevent violations of any applicable water quality standards.

2.1.2 Filter Fabric

The geotextile shall comply with the requirements of ASTM D 4439, and shall consist of polymeric filaments which are formed into a stable network such that filaments retain their relative positions. The filament shall consist of a long-chain synthetic polymer composed of at least 85 percent by weight of ester, propylene, or amide, and shall contain stabilizers and/or inhibitors added to the base plastic to make the filaments resistant to deterioration due to ultraviolet and heat exposure. The filter fabric shall meet the requirements in Table 01355-1.

Table 01355-1
FILTER FABRIC FOR SILT SCREEN FENCE

Physical Property	Test Procedure	Strength Requirement
Grab Tensile	ASTM D 4632	100 pounds minimum
Elongation (%)	ASTM D 4632	30% maximum
Trapezoid Tear	ASTM D 4533	55 pounds minimum
Permittivity	ASTM D 4491	0.2 second ⁻¹
AOS (U.S. Std Sieve)	ASTM D 4751	20-100

2.1.3 Silt Fence Stakes and Posts

The Contractor may use wooden stakes, steel posts, concrete barriers, or other suitable means for fence installation.

2.1.4 Mill Certificate or Affidavit

A mill certificate or affidavit shall be provided attesting that the fabric and factory seams meet chemical, physical, and manufacturing requirements specified above. The mill certificate or affidavit shall specify the actual Minimum Average Roll Values and shall identify the fabric supplied by roll identification numbers. The Contractor shall submit a mill certificate or affidavit signed by a legally authorized official from the company manufacturing the filter fabric.

2.1.5 Identification Storage and Handling

Filter fabric shall be identified, stored and handled in accordance with ASTM D 4873.

2.2 COMPONENTS FOR STRAW BALES

Straw bales shall not be used.

2.3 OIL SPILL CONTAINMENT PRODUCTS

The Contractor shall select booms, sorbent pads, and other oil spill containment products, as required, and in accordance with applicable Federal, State, and local regulations.

PART 3 EXECUTION

3.1 ENVIRONMENTAL PERMITS AND COMMITMENTS

The Contractor shall comply with requirements of all regulatory approvals, permits, certifications, or licenses. The CO will not obtain any on-site permits for this project; see contract clause PERMITS AND RESPONSIBILITIES. Permits for on-site work are not required for this project; however, the Contractor must comply with substantive portions of applicable regulations. The Contractor shall be responsible for providing all information needed to obtain regulatory approvals from Federal, State, and local agencies for on-site work where substantive permit requirements must be met. The Contractor shall be

responsible for implementing the terms and requirements of the appropriate permits and regulatory approvals. The Contractor shall be responsible for obtaining all approvals required for off-site transportation and disposal of dredged material in accordance with Section 02120 TRANSPORTATION AND DISPOSAL OF HAZARDOUS AND NON-HAZARDOUS MATERIALS.

3.2 LAND RESOURCES

The Contractor shall confine all activities to areas defined by the Drawings and Specifications. Prior to the beginning of any construction, the Contractor shall identify any land resources to be preserved within the work area. Except in areas indicated on the drawings or specified to be cleared, the Contractor shall not remove, cut, deface, injure, or destroy land resources including trees, shrubs, vines, grasses, topsoil, wetlands, and land forms without approval. No ropes, cables, or guys shall be fastened to or attached to any trees for anchorage unless specifically authorized. The Contractor shall provide effective protection for land and vegetation resources at all times as defined in the following subparagraphs. Stone, soil, or other materials displaced into uncleared areas shall be removed by the Contractor.

3.2.1 Work Area Limits

Prior to commencing construction activities, the Contractor shall mark the areas that need not be disturbed under this Contract. Isolated areas within the general work area which are not to be disturbed shall be marked or fenced. Monuments and markers shall be protected before construction operations commence. Where construction operations are to be conducted during darkness, any markers shall be visible in the dark. The Contractor's personnel shall be knowledgeable of the purpose for marking and/or protecting particular objects.

3.2.2 Landscape

Trees, shrubs, vines, grasses, land forms and other landscape features indicated and defined on the Drawings to be preserved shall be clearly identified by marking, fencing, or wrapping with boards, or any other approved techniques. The Contractor shall restore landscape features damaged or destroyed during construction operations outside the limits of the approved work area.

3.2.3 Erosion and Sediment Controls

The Contractor shall be responsible for providing erosion and sediment control measures in accordance with Federal, State, and local laws and regulations. The erosion and sediment controls selected and maintained by the Contractor shall be such that water quality standards are not violated as a result of the Contractor's construction activities. The area of bare soil exposed at any one time by construction operations should be kept to a minimum. The Contractor shall construct or install temporary and permanent erosion and sediment control best management practices (BMPs) as specified in the Environmental Protection Plan in accordance with Section 01400 REMEDIAL ACTION MANAGEMENT PLAN and approved by the CO. BMPs may include, but are not limited to, stockpile covers, bank

stabilization, slope stabilization, silt fences, construction of terraces, interceptor channels, sediment traps, inlet and outfall protection, diversion channels, and sedimentation basins. Any temporary measures shall be removed after the area has been stabilized.

3.2.3.1 Stabilization Practices

The stabilization practices may include, but are not limited to, temporary seeding, mulching, geotextiles, sod stabilization, erosion control mats, protection of trees, and preservation of mature vegetation. On the daily Contractor Quality Control (CQC) Report, in accordance with Section 01451 CONTRACTOR QUALITY CONTROL, the Contractor shall record the dates when major land-disturbing activities occur; when remediation activities temporarily or permanently cease on a portion of the Site; and when stabilization practices are initiated. Stabilization practices shall be initiated as soon as practicable, but no more than 14 calendar days after remediation activities have temporarily or permanently ceased, except where the remediation activity will resume with 21 calendar days from when activities ceased or unsuitable conditions exist on the Site caused by weather. In the case where stabilization practices have not been initiated due to unsuitable weather conditions, stabilization practices shall be initiated as soon as practicable after conditions become suitable.

3.2.3.2 Structural Practices

Structural practices shall be implemented to divert flows from exposed soils; temporarily store flows; or otherwise limit runoff, and discharge of pollutants from exposed areas of the Site. Structural practices shall be implemented in a timely manner during the installation process to minimize erosion and sediment runoff. The structural practices shall include grading, silt fences, and straw bales. The Contractor shall perform grading to minimize surface water runoff onto exposed soils. The Contractor shall provide silt fences as a temporary structural practice to minimize erosion and sediment runoff. Silt fences shall be properly installed to effectively retain sediment immediately after completing each phase of work where erosion would occur in the form of sheet and rill erosion. Final removal of silt fence barriers shall be upon approval by the CO.

3.2.4 Contractor Facilities and Work Areas

The Contractor's field offices, staging areas, stockpile storage, and temporary buildings shall be placed in areas designated in the Site Plan, Section 01500 TEMPORARY CONSTRUCTION FACILITIES, or as directed by the CO. Temporary movement or relocation of Contractor facilities shall be made only when approved by the CO. Erosion and sediment controls shall be provided for on-site stockpile, borrow, and spoil areas to prevent sediment from entering nearby waters. Temporary excavation and embankments for plant and/or work areas shall be controlled to protect adjacent areas.

3.2.5 Installation of Silt Fences

The Contractor shall install silt fences, as required, to prevent violations of any water quality standards.

3.2.6 Maintenance of Silt Fence

The Contractor shall maintain the temporary and permanent vegetation, erosion and sediment control measures, and other protective measures in good and effective operating condition by performing routine inspections to determine condition and effectiveness, by restoration of destroyed vegetative cover, and by repair of erosion and sediment control measures and other protective measures.

3.2.7 Inspections of Silt Fence

The Contractor shall inspect disturbed areas of the Site, areas used for storage of materials that are exposed to precipitation that have not been finally stabilized, stabilization practices, structural practices, other controls, and area where vehicles exit the Site at least once every 7 calendar days and within 24 hours of the end of any storm that produces 0.5 inches or more rainfall at the Site. Where sites have been finally stabilized, such inspection shall be conducted at least once every month.

3.3 WATER QUALITY MONITORING

The Contractor shall obtain and analyze water quality samples. Samples shall be collected to monitor short-term water quality impacts from dredging, capping, and associated in-water construction activities, and to invoke corrective actions or modify dredging or capping procedures, if necessary, to bring construction activities into compliance with water quality criteria.

3.3.1 Objectives of Water Quality Monitoring

The overall objective of water quality monitoring is to provide ongoing assessment of water quality impacts during dredging, capping, and construction activities. Specific objectives are as follows:

- a. To document water quality conditions during construction activities and ambient conditions prior to construction activities
- b. To ensure that water quality parameters (dissolved oxygen, turbidity, temperature, and total suspended solids) in the vicinity of the construction sites do not exceed prescribed limits
- c. To guide the Contractor to modify construction operation activities as necessary to protect the receiving water environment
- d. To provide continuous visual monitoring during construction for the presence of oily sediment, sheen, and the presence of distressed or dying fish

3.3.2 Monitoring Parameters and Performance Criteria

Performance criteria for water quality monitoring are designed to fulfill the substantive requirements of the Clean Water Act (CWA) Section 401 water quality compliance certification. Compliance with the CWA is identified as an Applicable or Relevant and Appropriate Requirement (ARAR) in the Record of Decision (ROD) for this project.

Consistent with this requirement, the Contractor shall ensure that all project activities comply with the Water Quality Standards for Surface Waters of the State of Washington (WAC 173-201A), a delegated state authority for CWA regulation. In addition, the Contractor shall ensure that all project activities comply with the Section 401 Water Quality Certification (WQC), as issued by EPA for this project. The WQC may contain provisions in addition to those listed herein. If the requirements of the WQC conflict with any requirements of these Specifications, the WQC shall take precedence.

The Contractor shall monitor impacts to water quality in the vicinity of dredging and other construction activities (including but not limited to cap placement and outfall extension construction) for the following parameters:

- a. Dissolved oxygen (DO)
- b. Turbidity
- c. Temperature
- d. Total suspended solids (TSS)
- e. Sheens

Remediation areas for this project are situated in Class A waters of the State, per WAC 173-201A. Water quality compliance criteria for Class A water are listed in Table 01355-2.

Table 01355-2
WATER QUALITY PARAMETERS AND COMPLIANCE CRITERIA

Parameter	Compliance Criteria	Basis	Point of Compliance
Dissolved Oxygen	No less than 6 mg/L; if the DO is already below 6 mg/L, then the project shall not cause DO to decrease by 0.2 mg/L.	WAC 173-201A	Compliance boundary
	No less than 4 mg/L	Acute effects	“Early Warning” location
Turbidity	No greater than 5 NTU over background when background is 50 NTUs or less; no greater than 10% increase when background is >50 NTUs.	WAC 173-201A	Compliance boundary
Temperature	<16°C; and no incremental increase >0.3°C allowed when background temperature naturally exceeds 16°C.	WAC 173-201A	Compliance boundary
Total Suspended Solids	For informational purposes (no criteria available)	—	—
Sheens	No visible sheens allowed outside the work area. Sheens shall be contained with booms or other appropriate controls.	WAC 173-201A	All surface water outside of containment booms

Notes:

°C - degrees Celsius

DO - dissolved oxygen

mg/L - milligram per liter

NTU - Nephelometric turbidity unit

WAC - Washington Administrative Code

< - less than

> - greater than

3.3.3 Monitoring Locations

The Contractor shall perform water quality monitoring in the vicinity of dredging and in-water construction operations, including, but not limited to, sediment capping.

Monitoring will occur only when the listed activity is in progress and at specified times and frequencies during the listed activity. Monitoring shall be performed at the water quality compliance boundary at the edge of the mixing zone, and at an “early warning” location inside the mixing zone, as described in paragraph 3.3.4 Points of Compliance and Monitoring Locations.

3.3.4 Points of Compliance and Monitoring Locations

Currents at the Site are weak and variable, and generally in response to tidal fluctuation. Three down-current locations and one up-current location will be monitored as shown on the Drawings.

Compliance boundaries shall be established based on a mixing zone length of 300 feet, unless otherwise specified in the WQC. Mixing zones shall be oriented radially around each construction activity, and shall migrate with the activity.

Two of the down-current monitoring locations shall be at the mixing zone boundary. The third down-current monitoring location shall be at the midpoint of the mixing zone to provide an “early warning” of water quality impacts. This midpoint location shall comply with the minimum requirement for dissolved oxygen (see Table 01355-2); however, this location is not a point of compliance for other water quality criteria.

The monitoring locations may shift laterally along the compliance boundary to intercept any visible turbidity plumes emanating from construction activities. Monitoring locations shall be adjusted to target the turbidity plume, which ~~shall may~~ be tracked hydro-acoustically **or by additional turbidity tests, consistent with if required by** the WQC. If no distinct turbidity plume can be identified, monitoring locations shall be in the area immediately down current of the dominant tidal flow. If more than one construction activity is taking place in close proximity, such that the mixing zones for the activities overlap, the construction zone may be treated as one contiguous area for monitoring purposes. In such cases, the CO shall be consulted to determine how best to modify the compliance boundaries and monitoring stations.

3.3.5 Depth of Sampling

Water quality parameters shall be averaged over the depth of the water column, based on discrete measurements at three water depths. Measurements shall be adjusted within the depth range to target the turbidity plume, which shall be tracked hydro-acoustically. If no distinct turbidity plume can be identified, measurements shall be obtained at the standard depths (i.e., surface, mid-depth, and near bottom). At each sampling station, three depth-specific measurements shall be collected at shallow, intermediate, and deep water levels. The shallow measurements shall be collected approximately 2 feet below the water surface. The deep measurements shall be collected within 6 feet of the mudline, and the intermediate measurements shall be collected near the midpoint of the water column.

No portion of the monitoring instrument (e.g. an anchor on the end of the wire line) shall touch the sea floor during monitoring, especially during collection of the deep-water measurement. This will prevent operator-induced disturbance of seafloor sediments that could cause spurious and elevated turbidity measurements. Monitoring instruments shall be calibrated daily or more frequently.

TSS samples shall be collected using a “discrete” type water column sampler from the midpoint of the water column.

3.3.6 Monitoring Schedules

Water quality monitoring shall be performed according to three schedules: intensive, routine, and limited. Ambient monitoring shall be performed in conjunction with the three schedules as reference and background checks on water quality outside of the construction area and

before construction activities, respectively. The types of monitoring and schedules are shown in Table 01355-3.

Table 01355-3
WATER QUALITY MONITORING SCHEDULE

Monitoring	Schedule	Initiation Conditions for Schedule
Ambient	<ul style="list-style-type: none"> • Background collected 24-48 hours prior to initiation of construction • Reference (outside of the influence of activity) collected with all other water quality monitoring events 	<ul style="list-style-type: none"> • Background: on-site measurements prior to any in-water construction activity • Reference: in conjunction with all other water quality monitoring events (intensive, routine, or limited)
Intensive	<ul style="list-style-type: none"> • Minimum twice daily for 2 days following any initiation condition for intensive monitoring. 	<ul style="list-style-type: none"> • Startup of any in-water construction activity • In response to any major modification to construction procedures • In response to an exceedance of any water quality performance criteria at the compliance boundary
Routine	<ul style="list-style-type: none"> • Once daily 	<ul style="list-style-type: none"> • No performance criteria are exceeded at the compliance boundary during intensive monitoring for 2 days; requires CO approval
Limited	<ul style="list-style-type: none"> • Once weekly 	<ul style="list-style-type: none"> • No performance criteria are exceeded at the compliance boundary during routine monitoring for 1 week; requires CO approval

3.3.6.1 Ambient Monitoring

The Contractor shall implement an ambient water quality monitoring program that includes background and reference monitoring locations. The procedures of this program shall be summarized in the Environmental Protection Plan in accordance with Section 01400 REMEDIAL ACTION MANAGEMENT PLAN. The objective of the ambient water quality monitoring program is to determine ambient background values for the water quality parameters listed in Table 01355-2.

3.3.6.1.1 Preconstruction Background Monitoring

Preconstruction background water quality measurements will be collected at a total of three reference station locations as shown on the Drawings. The background monitoring measurements shall be collected at depths in accordance with paragraph 3.3.5 Depth of Sampling. Background monitoring measurements shall be collected 24 to 48 hours prior to initiation of any in-water construction.

3.3.6.1.2 Reference Monitoring During Construction

In addition to pre-construction monitoring, at least one of the seaward reference station locations shall be monitored concurrently with the monitoring of construction activities, to check for unusual excursions of ambient conditions. The selection of the reference

monitoring location during construction activities shall be rotated as necessary to ensure that the reference monitoring location is beyond the influence of construction activities. Background values shall be recalculated monthly to incorporate additional measurements collected during construction.

3.3.6.1.3 Background Calculation

The background values for turbidity and temperature shall be established as the upper 90th percentile values of ambient water quality measurements. The background value for DO shall be established as the lower 10th percentile value of ambient water quality measurements. Percentiles shall be calculated based on a nonparametric ranking of the data.

3.3.6.2 Intensive Monitoring

Intensive Monitoring shall be performed at a minimum frequency of twice daily and shall be initiated at the following times:

- a. During startup of any in-water construction activity
- b. In response to any major modification to construction procedures
- c. In response to an exceedance of any water quality performance criteria at the compliance boundary (see Paragraph 3.3.9 Determination of Compliance for exceedance criteria)

Intensive Monitoring shall continue for a period of two days following any of the triggering conditions listed above. If performance criteria have not been exceeded at the water quality compliance boundary within the 2-day startup period, then Routine Monitoring may be initiated with CO approval.

3.3.6.3 Routine Monitoring

Routine Monitoring shall be performed at a minimum frequency of once daily. Routine Monitoring shall be conducted if no performance criteria are exceeded during the Intensive Monitoring period. If the Routine Monitoring performance criteria have not been exceeded at the water quality compliance boundary during 5 consecutive days, then Limited Monitoring may be initiated with CO approval, as described below.

3.3.6.4 Limited Monitoring

Limited Monitoring shall be performed at a minimum frequency of once per week. Limited Monitoring may be conducted during such operations if no performance criteria are exceeded during Routine Monitoring for one week.

Upon review of the monitoring records, the CO may increase the monitoring frequency and/or add sample locations to provide additional assurance that water quality impacts are being controlled, or decrease the monitoring frequency if records indicate little risk of adverse impacts.

3.3.7 Timing of Monitoring Activities

During all work activities, the water surface shall be continually visually monitored for sheens or distressed fish or wildlife. Occurrence of sheens beyond containment areas shall be reported to the CO immediately and corrective action shall be taken to contain and remove the sheen.

During Intensive Monitoring (twice daily), the first and second round of measurements shall be separated by a minimum 3-hour period. One of these measurements shall occur during strong ebb or flood tidal conditions. During Routine Monitoring (once per day) and Limited Monitoring (once per week), water quality measurements will be conducted during strong ebb or flood tidal conditions.

3.3.8 Sampling and Analysis Requirements

TSS samples shall be analyzed by EPA Method 160.2 with a 5-day turnaround time for laboratory results. Temperature, turbidity, and DO shall be measured by direct-reading meter. Instrument precision shall be within the following limits:

- a. DO: ± 0.5 mg/L
- b. Turbidity: ± 0.5 NTU
- c. Temperature: $\pm 0.1^{\circ}\text{C}$

3.3.9 Determination of Compliance

Compliance shall be determined at the boundary of the mixing zone by comparing water quality measurements to the performance criteria listed in Table 01355-2. Monitoring performed at the mid-point of the mixing zone shall also be evaluated for compliance with the acute effects dissolved oxygen criterion. However, the mid-point location shall not be used to determine compliance with any other parameters.

If a water quality criterion is exceeded, the instrument calibration shall be checked and a second group of measurements shall be collected immediately at all monitoring locations associated with the activity of concern. An exceedance of the water quality criterion shall be confirmed if the criterion is exceeded for a second time at the compliance boundary. The exceedance need not be confirmed at the same location as the original exceedance, because currents and tides may cause the construction-induced plume to shift its orientation.

3.3.10 Corrective Action

Two types of corrective action shall be implemented depending on the nature of the water quality impact(s):

- a. Modification of Operations: If water quality criteria for turbidity are exceeded, the Contractor shall immediately take appropriate steps to correct the exceedance and improve water quality conditions. Such steps may include modified construction management practices, engineering controls, and other measures, as appropriate. If

sheens are observed at any time, the Contractor shall contain the sheens with containment booms. The Contractor shall remove any sheens with sorbent materials. If corrective actions do not result in attaining water quality compliance criteria at the compliance boundary, construction activities may be stopped at the direction of the CO.

- b. Cessation of Operations: Construction activities shall cease as a result of the following conditions:
 - i. The first indication of significant oil sheen migrating outside of containment booms;
 - ii. DO levels fall below 4.0 mg/L at any location; or
 - iii. The first indication of distressed or dying fish or wildlife in the vicinity of construction activities.

When such conditions occur, operations shall cease and the Contractor shall take all necessary steps to alleviate the problem. Water quality parameters shall be measured immediately at the location of the problem. The CO shall be immediately notified of the condition. Operations may resume under the direction of the CO when the problem has been rectified, and water quality parameters are in compliance with performance criteria.

3.3.11 Daily Reports

The Contractor shall submit all water quality monitoring results from measurements taken during the previous day with each Daily Contractor Quality Control Report in accordance with Section 01451 CONTRACTOR QUALITY CONTROL.

3.3.12 Water Quality Monitoring SAP

The Contractor shall submit a Water Quality Monitoring Sampling and Analysis Plan (SAP) that includes a Field Sampling Plan and Quality Assurance Project Plan (FSP/QAPP) for approval as an appendix to the Environmental Protection Plan, in accordance with Section 01400 REMEDIAL ACTION MANAGEMENT PLAN. The Water Quality Monitoring SAP shall explain in detail the methods to be employed by the Contractor, as required, to comply with the Specifications.

3.3.13 Monthly Water Quality Report

The Contractor shall submit a monthly Water Quality Report. The report shall contain a summary of all in-water construction activities during the month, Contractor performance relative to the water quality compliance criteria (Table 01355-2), any exceedance of the compliance criteria and the corrective actions taken, and updated background water quality values.

3.4 AIR RESOURCES

Equipment operation, activities, or processes performed by the Contractor in accomplishing the specified construction shall be in accordance with all Federal and State air emission and performance laws and standards.

3.4.1 Particulates

Dust particles; aerosols and gaseous by-products from construction activities; and processing and preparation of materials, shall be controlled at all times, including weekends, holidays, and hours when work is not in progress. The Contractor shall maintain excavations, stockpiles, haul roads, permanent and temporary access roads, plant sites, spoil areas, borrow areas, and other work areas within or outside the project boundaries free from particulates which would cause the air pollution standards to be exceeded or which would cause a hazard or a nuisance. Sprinkling will be permitted to control particulates in the work area. Sprinkling, to be efficient, must be repeated to keep the disturbed area damp at all times. The Contractor must have sufficient, competent equipment available to accomplish these tasks. Particulate control shall be performed as the work proceeds and whenever a particulate nuisance or hazard occurs. The Contractor shall comply with all State and local visibility regulations.

3.4.2 Odors

Odors from construction activities shall be controlled at all times. The odors shall not cause a health hazard and shall be in compliance with State regulations and/or local ordinances.

3.4.3 Sound Intrusions

The Contractor shall keep construction activities under surveillance and control to minimize environment damage by noise. The Contractor shall comply with the provisions of the State of Washington rules and City of Seattle regulations.

3.4.4 Burning

Burning will not be allowed on the Site.

3.5 HTRW AIR EMISSION CONTROL (NOT USED)

3.6 CHEMICAL MATERIALS MANAGEMENT AND WASTE DISPOSAL

Disposal of wastes shall be as specified in Section 02120 TRANSPORTATION AND DISPOSAL OF HAZARDOUS AND NON-HAZARDOUS MATERIALS. Management of dredged sediments and free liquids drained from dewatered sediment shall be in accordance with Section 02325 DREDGING.

3.7 RECYCLING AND WASTE MINIMIZATION

The Contractor shall participate in State and local government sponsored recycling programs. The Contractor is further encouraged to minimize solid waste generation throughout the duration of the project.

3.8 NON-HAZARDOUS SOLID WASTE DIVERSION REPORT (NOT USED)

3.9 HISTORICAL, ARCHAEOLOGICAL, AND CULTURAL RESOURCES

Previous investigations during the remedial design phase did not identify any resources that require mitigation. A potential still exists, however, that subsurface excavation could encounter cultural resources associated with ethnohistoric and/or prehistoric use by Native American inhabitants of Puget Sound. If, during excavation or other construction activities, any previously unidentified or unanticipated resources are discovered or found, all activities that may damage or alter such resources shall be temporarily suspended. Resources covered by this paragraph include but are not limited to: any human skeletal remains or burials; artifacts; shell, midden, bone, charcoal, or other deposits; rocks or coral alignments, pavings, wall, or other constructed features; and any indication of agricultural or other prehistoric human activities. Pilings are not covered by this paragraph. Upon such discovery or find, the Contractor shall immediately notify the CO. While waiting for instructions the Contractor shall record, report, and preserve the finds in accordance with the National Historic Preservation Act and 43 Code of Federal Regulations (CFR) Subtitle A Part 7, Protection of Archaeological Resources and State laws (RCW 27.44 Indian Graves and Records and RCW 27.53 Archaeological Sites and Resources).

3.10 INTEGRATED PEST MANAGEMENT (NOT USED)

3.11 PREVIOUSLY USED EQUIPMENT

The Contractor shall thoroughly clean all previously used construction equipment prior to bringing it onto the Site. The Contractor shall ensure that the equipment is free from soil residuals, egg deposits from plant pests, noxious weeds, and plant seeds. The Contractor shall consult with the U.S. Department of Agriculture (USDA) jurisdictional office for additional cleaning requirements.

3.12 MAINTENANCE OF POLLUTION CONTROL FACILITIES

The Contractor shall maintain permanent and temporary pollution control facilities and devices for the duration of the contract or for that length of time construction activities create the particular pollutant. These include, but are not limited to, oil spill containment booms, sorbent materials, and erosion and sediment control devices and filters for overflow of free-draining liquids from dredged sediment dewatering.

3.13 MILITARY MUNITIONS (NOT USED)

3.14 TRAINING OF CONTRACTOR PERSONNEL

The Contractor's personnel shall be trained in all phases of environmental protection and pollution control. The Contractor shall conduct environmental protection/pollution control meetings for all Contractor personnel prior to commencing construction activities. Meetings shall be conducted, at a minimum, (1) prior to commencing construction activities, (2) for new personnel, and (3) when Site conditions change. The training and meeting agenda shall include: methods of detecting and avoiding pollution; familiarization with statutory and contractual pollution standards; installation and care of devices, vegetative covers, and instruments required for monitoring purposes to ensure adequate and continuous environmental protection/pollution control; anticipated hazardous or toxic chemicals or wastes, and other regulated contaminants; recognition and protection of archaeological sites, artifacts, wetlands, and endangered species and their habitat that are known to be in the area.

3.15 CONTAMINATED MEDIA MANAGEMENT

Contaminated environmental media consisting of, but not limited to, dredged sediments and drained free-liquids from dewatering of sediments shall be managed in accordance with Section 02325 DREDGING and Section 02120 TRANSPORTATION AND DISPOSAL OF HAZARDOUS AND NON-HAZARDOUS MATERIALS.

3.16 POST CONSTRUCTION CLEANUP

The Contractor shall clean up all areas used for construction in accordance with Contract Clause: "Cleaning Up". The Contractor shall, unless otherwise instructed in writing by the CO, obliterate all signs of temporary construction facilities such as haul roads, work area, structures, foundations of temporary structures, stockpiles of excess or waste materials, and other vestiges of construction prior to final acceptance of the Work. The disturbed area shall be graded, filled and the entire area seeded unless otherwise indicated.

END OF SECTION

SECTION 01720

SURVEYING

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only. The most recent version of the reference applies.

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 1110-2-1003 (2002) USACE Hydrographic Surveying Engineering Manual

1.2 DESCRIPTION OF WORK

The Contractor shall provide all materials, items, operations, or methods specified, listed, or scheduled on the Drawings or in the Specifications, including all materials, labor, equipment, and incidentals necessary to conduct proper surveys required to determine seafloor and shore elevations within the area of the Work.

The Contractor shall perform hydrographic and topographic surveys for layout of the Work, to obtain data for final quantity for dredging, and to verify the grades of final "as-built" construction for acceptance of completed work. Hydrographic surveying shall be performed as a way of accurately monitoring dredging and capping activities in the MSU. Topographic surveys shall be performed to tie in the hydrographic survey to the top of slope and provide verification of hydrographic survey data.

1.3 QUALIFICATIONS

All survey, layout, and related work shall be performed and signed by a professional land surveyor registered in the State of Washington. The surveyor shall have actively engaged in hydrographic and land survey operations during the past 3 years.

1.4 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals with an "FIO" designation are for information only. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES.

SD-01 Data

Survey Schedule and Drawings Depicting Tracklines; GA

Prior to the start of any survey work, the Contractor shall submit a schedule for all survey work and drawings that show the tracklines for each hydrographic survey.

Electronic Positioning System and Sounding Equipment Specifications; GA.

Prior to the start of any survey work, the Contractor shall submit specifications for all proposed hydrographic survey equipment.

SD-08 Statements

Survey Crew Qualifications; GA.

Prior to start of any survey work, the Contractor shall submit name, address, telephone number, and qualifications of the surveyor, crew chief, superintendent, and all other persons who are proposed to perform surveys or survey-related duties to the Contracting Officer (CO) for review and acceptance.

SD-18 Records

Field Notes, Computations and Survey Quantities; GA.

On the day the Contractor submits request for progress payment, the Contractor shall furnish the CO copies of all field notes, computations, any records relating to the quantity survey or to the layout of the work, and an IBM PC-compatible version of any computer software required to interpret the finished data and records. The Contractor is responsible for converting data and drawing files to a standard software version approved by the CO. Standard ASCII format is pre-approved for data files.

Survey data shall be provided in x, y, z (easting, northing, elevation) format. Each data file shall include a descriptive header including, but not limited to: software and equipment information, client, project, horizontal and vertical datum, units, tidal correction, survey type, alignment, and stations surveyed.

1.5 PROJECT RECORD DOCUMENTS

The Contractor shall maintain on Site a complete, accurate log of control of survey work as it progresses.

Upon completion of the Work, the Contractor shall submit Record Documents to the CO under the provisions of Section 01780 RECORD DRAWINGS.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.1 GENERAL

The Contractor shall exercise care during the execution of the Work to minimize any disturbance to existing property and to the landscape and waters in the areas surrounding the work Site. Survey crews shall not traverse into controlled or contaminated areas without approval from the CO.

3.2 SURVEY REFERENCE POINTS

Five survey control points (PSR-1 through PSR-5) have been established on land and are shown on the Drawings. For all surveys, the horizontal datum that shall be used by the Contractor is Washington State Plane North northing and easting coordinates in feet, using the North American Datum (NAD 1983). All water-based surveys shall be shown in mean lower low water (MLLW), raw and corrected in feet.

The Contractor shall protect survey control points prior to starting site work and preserve permanent reference points during construction. The Contractor shall not relocate site reference points without prior written approval from the CO.

The Contractor shall promptly report to the CO the loss, damage, or destruction of any reference point or relocation required because of changes in grades or other reasons. The Contractor shall replace dislocated survey control points based on original survey control at no additional cost to the Government. Replacement of dislocated survey control points shall be done by a land surveyor licensed in the State of Washington.

3.3 INSPECTION

The Contractor shall verify locations of Site reference and survey control points prior to starting work. The Contractor shall promptly notify the CO of any discrepancies discovered. The Contractor shall also verify layouts periodically during construction.

3.4 SURVEY REQUIREMENTS

3.4.1 General

The Contractor shall reference survey and site reference points to the provided control monuments and record locations of survey control points, with horizontal and vertical data, on Project Record Documents.

3.4.2 Topographic Surveys

Topographic surveys for areas above MLLW shall be done before and after all capping in RA1. These surveys shall be done to supplement the hydrographic surveys required for the in water work. Surveys shall be done with cross section intervals not to exceed 50 feet on center from which a 1-foot interval contour map will be required in an electronic format. The topographic surveys shall cover RA1 from +15 feet MLLW down to 0 feet MLLW, or sufficiently low to tie in with bathymetric survey data.

The Contractor shall with its own forces obtain working or construction lines or grades as needed. All control surveys for elevation shall be ± 0.01 foot and, for horizontal, control angles shall be to the nearest 20 seconds ± 10 seconds, and measured distances shall be to ± 0.01 foot. All measurement surveys for elevation shall be to the nearest 0.01 foot ± 0.005 foot and for horizontal distances shall be to ± 0.1 foot.

The Contractor shall provide all materials as required to properly perform the surveys, including, but not limited to, instruments, tapes, rods, measures, mounts and tripods, stakes and hubs, nails, ribbons, other reference markers, and all else as required. All material shall be of good professional quality and in first-class condition.

All lasers, transits, and other instruments shall be calibrated and maintained in accurate calibration throughout the execution of the work. Calibration certificates shall be submitted to the CO prior to the use of any instrument.

The Contractor shall furnish all materials and accessories (i.e., grade markers, stakes, pins, spikes, etc.) required for the proper location of grade points and line. All marks given shall be carefully preserved and, if destroyed or removed without the CO's approval, they shall be reset, if necessary, at the Contractor's expense.

3.4.3 Hydrographic Surveys

3.4.3.1 General

Hydrographic surveys shall be performed in accordance with the standards given in USACE Engineering Manual 1110-2-1003. Surveys shall include both hydrographic and topographic (upland data) in areas where caps extend above low-water elevations.

3.4.3.2 Procedures

Hydrographic survey procedures (positioning modes, electronic positioning system [EPS] calibration, data reduction, adjustment, processing, and plotting) shall conform to industry standards. Horizontal location observations shall compensate for errors, geodetic corrections, and atmospheric variations. Data recordation, annotation, and processing procedures shall be consistent with recognized hydrographic survey standards. Failure to perform and process such surveys in accordance with recognized standards will result in a rejection and nonpayment for work performed. Tide data from National Oceanic and

Atmospheric Administration (NOAA) tide gauge # 9447130 shall be used to adjust the survey data to MLLW and to compare with the real-time kinematic (RTK) vertical data.

3.4.3.3 Equipment

The Contractor shall conduct hydrographic surveys using a real-time kinematic differential global positioning system (RTK-DGPS) and a single-beam, dual-frequency or multi-beam, single-frequency echosounder system to obtain soundings. The survey vessel shall be equipped with the RTK-DGPS for determining the horizontal and vertical location of the soundings. The system shall be capable of sub-meter horizontal positioning accuracy and 1.6 inches vertical positioning accuracy. The sounding equipment shall produce a high-resolution, permanent record that accurately depicts bottom profiles. All proposed surveying equipment shall be approved by the CO prior to beginning the Work, as required in paragraph 1.4 SUBMITTALS.

- a. Pre-Construction Bathymetry and As-Built Bathymetry surveys for all Work under the Contract shall be accomplished with multi-beam single-frequency equipment. These surveys shall cover RA1 through RA5.
- b. All other surveys including, but not limited to, pre-capping surveys, cap placement completion surveys, the pre-dredging survey, and the final dredging survey shall be accomplished with single-beam dual-frequency equipment.

The Contractor shall conduct and document the quality control procedures recommend by the equipment manufacturer and procedures shown in the USACE Hydrographic Manual, Table 9-6 (for single-beam echosounder systems) or Table 11-2 (for multi-beam echosounder systems).

3.4.3.4 Soundings

Sounding and survey lines shall be located as follows:

- a. For pre-capping and cap completion surveys in RA1, sounding and survey lines shall be generally perpendicular to the shoreline and shall intersect the baseline at intervals of no greater than 50 feet. In addition, the sounding and survey lines shall be co-located with the transects shown on the Drawings
- b. For pre-capping and cap completion surveys in RA2a, RA2b, and RA3, sounding lines shall be on a grid system with lines no greater than 50 feet apart.
- c. For pre-capping and cap completion surveys in RA4, sounding lines shall be parallel to the slope gradient with lines no greater than 50 feet apart.
- d. For the pre-dredging and final dredging surveys, sounding and survey lines shall be generally perpendicular to the shoreline and shall intersect the baseline at intervals of no greater than 50 feet. In addition, the sounding and survey lines shall be co-located with the transects shown on the Drawings

- e. Sounding lines shall extend a minimum of 50 feet beyond the project survey boundaries or as otherwise approved. Interval between soundings on each line shall not exceed 1 foot.
- f. All cap completion surveys and the final dredging survey shall be completed on the same sounding lines as the pre-capping and pre-dredging surveys. Soundings shall not deviate more than 10 feet left or right from the initial survey line.

Soundings shall be on MLLW datum. The sounding and survey lines shall be field marked on the fathogram chart during the data acquisition. The location, time of survey, tide height, and direction that line is surveyed shall also be marked on the fathograms.

At least five leadline soundings shall be conducted during each survey to confirm that the soundings meet the water depth accuracy requirements established for this project, which are shown in Table 01720-1.

**Table 01720-1
ACCURACY REQUIREMENTS FOR SOUNDINGS**

Survey Type	Water Depth	Accuracy
Single-Beam Surveys	0-30 feet	± 0.3 feet
	> 30 feet	± 1 % of water depth
Multi-Beam Surveys	0-60 feet	± 0.3 feet
	> 60 feet	± 0.5 % of water depth

3.4.3.5 Field Notes

Field notes shall indicate the location of each sounding line, the date and time (hour and minutes) each sounding line is taken, and explanation for any line terminated early. The tide shall be recorded for each line surveyed and noted on the section during the survey. Notes shall include tidal data, i.e., height of tide (MLLW datum), bar checks, time of the tide readings, and date and location of the tide gage used for each area surveyed.

3.4.3.6 Quantity Computations

For dredging surveys, quantities shall be computed to the nearest cubic yard based on the pre-and post dredging sounding lines surveyed. Pay volumes for dredging shall be determined by the Contractor using Triangulated Irregular Network (TIN) volume computations in accordance with paragraph 3.5 QUANTITY SURVEYS.

3.4.3.7 Survey Conference(s)

At the pre-construction conference, the Contractor's chief surveyor shall meet with the CO to discuss the survey proceedings, methods, and equipment to be employed for the Contractor's surveys.

3.4.3.8 Survey Timing and Quality Control

The Contractor shall perform hydrographic surveys as specified at the below listed times during this Contract. These surveys shall verify that all Contract dredging depths, structure, or fill dimensions are being obtained as specified. All surveys shall begin where capping commenced for each RA of the Work.

Progress surveys shall be conducted in RAs to monitor the accuracy of the work being performed. At a minimum, the Contractor shall perform the surveys required in Table 01720-2.

Table 01720-2
HYDROGRAPHIC SURVEYING REQUIREMENTS

RA	Event	Method
1-5	Pre-Construction Bathymetry	Multi-beam echosounding, with topographic survey above MLLW
1	Final Cap	Single-beam echosounding, with topographic survey above MLLW
2b and 4	Pre-Cap ^a	Single-beam echosounding
	Final Cap (RA2b)	Single-beam echosounding
	Final Cap (RA4 → surveys)	Single-beam echosounding
2a and 3	Pre-Dredging ^{a,b}	Single-beam echosounding
	Final Dredging ^{b,c}	Single-beam echosounding
	Final Cap (RA2a)	Single-beam echosounding
	Final Cap (RA3)	Single-beam echosounding
1-5	As-Built Bathymetry	Multi-beam echosounding, with topographic survey above MLLW

Notes:

^a These single-beam surveys may be accomplished concurrently with the multi-beam preconstruction survey.

^b The pre-dredge and final dredge surveys shall cover all dredge areas, including applicable portions of RA1.

^c The final dredge survey shall cover RA2a and RA3 and serve as the pre-cap survey in those RAs.

3.4.4 Positioning Control

3.4.4.1 Horizontal Position Control During Dredging and Capping

A short to medium range electronic positioning system (EPS) shall be activated during all in-water operations. This EPS shall be established, operated and maintained by the Contractor during the period of the contract when in-water work is actively underway. The EPS shall display and record the barge and bucket locations continuously (i.e., real-time positioning) during all in-water operations. The control requirements for this system shall comply with the minimum performance standards for Navigation and Dredging Support Surveys, as specified in EM 1110-2-1003, Table 3-1. The Contractor may also propose, for approval by the CO, alternate methods for monitoring the bucket position. The Government shall have access to the monitoring equipment to determine the location of capping equipment during the Work.

A continuous graphic printout plotter and/or graphic monitor shall be on any vessel using an EPS. A complete record copy of the position data (vessel track history), including date, time,

coordinates, and root-mean-square (RMS) (i.e., quality of position closure) shall be submitted to the CO as part of the Daily Contractor Quality Control (CQC) Report, in accordance with Section 01451 CONTRACTOR QUALITY CONTROL.

3.4.4.2 EPS System Configuration

The EPS system shall be, at a minimum, similar or equal in design, performance, accuracy, operation characteristics, and frequency to those identified in the USACE Hydrographic Surveying Engineering Manual (Hydrographic Manual), listed in paragraph 1.1 REFERENCES.

3.4.4.3 EPS Shore-Based Control

The Contractor shall be responsible for maintaining the established horizontal control to locate active and/or passive shore-based EPS transmitter/receiver devices (See paragraph 3.2 SURVEY REFERENCE POINTS). All control shall meet Third Order, Class I, accuracy standards as defined (and referenced) under paragraph 1.3 of the Hydrographic Manual. The Contractor shall obtain all right-of-entry permits and/or leases as required to operate and maintain shore-based electronic equipment on public/private property at no additional cost to the Government.

3.4.4.4 EPS Calibration

EPS calibration techniques shall conform to standard hydrographic surveying practice consistent with minimization of systematic errors inherent to and consistent with the selected EPS system, as specified under Chapters 1 and 4 of the Hydrographic Manual. The Contractor shall be responsible for accurate and reliable EPS calibration for the duration of this contract, and shall document calibration records as part of the Daily CQC Report.

3.4.4.5 EPS Breakdown

The Contractor shall have a backup system in the event that the primary system is rendered inoperable. In the event that both the primary and backup systems are rendered inoperative, the Contractor shall make provisions within 36 hours to be operational. No additional cost to the Government or increase in the Contract time will be allowed. In the event of a failure in either the shore-based or ship-based electronic equipment, the Government shall be immediately notified of the time of failure and time of repair.

3.4.4.6 Tidal Control During Dredging and Capping

To establish capping thickness to the MLLW datum, the Contractor shall adjust data to MLLW using tide data from the NOAA tide gauge. The tide data shall also be used to compare to the RTK vertical data. Tidal changes shall be recorded in MLLW datum, with these changes visually provided to the capping or survey vessel at all times during the capping process to allow proper adjustment of cap thickness. A printed record of the tidal changes shall become part of the Daily CQC Report in accordance with Section 01451 CONTRACTOR QUALITY CONTROL.

3.5 QUANTITY SURVEYS

The Contractor shall conduct quantity (elevation) surveys and the data derived from these surveys shall be used in computing the quantities for dredging in accordance with Section 02325 DREDGING. Progress quantity surveys are not required for capping activities; progress quantities will be based on weight of imported material delivered. The Contractor shall conduct the surveys and computations for any period for which progress payments are requested. These surveys and computations shall be done under the supervision of and shall be certified by a Washington-Licensed Land Surveyor or Washington-Licensed Civil Engineer. The surveyor or engineer shall have at least 5 years experience in computing earthwork quantities. The surveys shall also be conducted under the direction of a representative of the CO, unless the CO waives this requirement in a specific instance. Quantity calculations shall be prepared by the Contractor using the TIN volume technique, and using HYPACK™ MAX or other commercially-available software as approved by the CO. Additionally, the CO will make such computations as are necessary to verify the quantities of construction.

3.6 SURVEY RECORDS

On the day the Contractor submits request for progress payment, the Contractor shall furnish the CO originals of all field notes, computations, any records relating to the quantity survey (dredging) or to the layout of the Work, and an IBM PC-compatible version of any computer software required to interpret the finished data and records. The CO will use them as necessary to verify the amount of progress payments. The Contractor shall retain copies of all such material furnished to the CO.

3.7 PAYMENT AS AN INCIDENTAL

The cost to the Contractor of all Work and delays occasioned by giving lines and grades, or making other necessary measurements, will be considered as having been included in and incidental to the lump sum prices and unit prices for other items of the Work.

END OF SECTION

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